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Asia Pacific: Perspectives is a peer-reviewed journal published at least once a year, usually in April/May. It welcomes submissions from all fields of the social sciences and the humanities with relevance to the Asia Pacific region.* In keeping with the Jesuit traditions of the University of San Francisco, *Asia Pacific: Perspectives* commits itself to the highest standards of learning and scholarship.

Our task is to inform public opinion by a broad hospitality to divergent views and ideas that promote cross-cultural understanding, tolerance, and the dissemination of knowledge unreservedly. Papers adopting a comparative, interdisciplinary approach will be especially welcome. **Graduate students are strongly encouraged to submit their work for consideration.**

* 'Asia Pacific region' as used here includes East Asia, Southeast Asia, South Asia, Oceania, and the Russian Far East.

Editor's Introduction

by Joaquin L. Gonzalez III, Ph.D.

The editors of *Asia Pacific: Perspectives* are pleased to offer four important contributions to the scholarship on the Asia Pacific for this Summer 2007 issue.

The first article, by Dr. Sarita Jackson, bridges the Pacific Rim whose connections Dr. Evelyn Rodriguez traced back to the historic Manila-Acapulco Galleon trade in the May 2006 issue of *Perspectives*. In her essay, Dr. Jackson (University of Maryland) argues that economic intersections between Latin America , the Caribbean, Asia, and the Pacific have only deepened with the formal establishment of Asia-Pacific Economic Cooperation (or APEC for short) in 1989. Dr. Jackson adds that much of trade and investments have moved from intra-regional flows to cross-regional traffic. Not surprisingly, she adds, Pacific Rim economies that have moved away from intra-regional ties and gone into inter-regional trade deals have found themselves with increased access to other regional markets and larger economies, low cost producers, and more efficient production mechanisms.

With greater cross-regional integration and the growing economic control and influence of its Northeast Asian neighbors led by China and Japan, Richard Payne worries about the Southeast Asian economies bound together by their commitment to an Association of Southeast Asian Nations (or ASEAN) free trade area. In his study, the University of San Francisco M.A. in Asia Pacific graduate and long-time Asia consultant argues that a number of serious adjustments must be made in the ASEAN integration model to help counter act this East Asian regional imbalance and move forward with AFTA. These reforms include: (1) promoting deeper regional private sector initiatives; (2) pursuing a multi-polar strategy to integration; and (3) utilizing civil society and corporate voluntarism as a core strategy in promoting integration.

In the third article, Trisakti University (Jakarta, Indonesia) Economics Professor Tulus Tambulan presents an in-depth case study from Central Java in Indonesia. He reminds us of the continuing critical role of government even in this era of large-scale global privatization and cross-regionalization. This is particularly important in creating a better playing field between foreign-owned business and large enterprises (LEs) on the one hand and local small and medium enterprises (SMEs) on the other hand. In his study, Dr. Tambulan found that Indonesian government agencies are currently the largest providers of training and technology transfers in the highly competitive metal working sector.

Embedded in contemporary cross-regional arrangements and examined by Jackson and Payne are contractual labor capital movements and transnational immigration. Dr. Rica Llorente, who teaches at the University of Phoenix and California State University - East Bay, delves deep into the Filipino global diaspora in the final article of this issue. Interestingly, there is an old adage from her homeland the Philippines which can be paraphrased as "a community that does not know how to look back at its past and heritage will never get to its destination and legacy."

Recognizing this, Dr. Llorente, aggregates and analyzes currently available demographic data such as age, gender, occupation and regional concentration on Filipinos in the United States and other countries. In doing so she is able to determine critical patterns and trends in terms of the diaspora's future direction and strength.

We would like to thank our dedicated reviewers for their valuable comments, feedback, and suggestions for these incisive contributions to the literature on the Asia Pacific.

Cross-Regional Trade Cooperation: The Mexico-Japan Free Trade Agreement

by Sarita D. Jackson, Ph.D.

Abstract

Latin American and Asia-Pacific countries are fervently forging economic cooperative relationships, which began with the Asia-Pacific Economic Cooperation in 1989. The two regions have shifted away from looking intra-regionally for economic stability against the forces of globalization. Rather, they have moved towards emphasizing cross-regional trade pacts. Cross-regional trade pacts present a number of advantages for member countries. The Mexico-Japan FTA, as a case study, shows us that trade and FDI between member countries increase with cross-regional free trade agreements (FTA). However, FTAs between the Latin American and Asia-Pacific regions do not have a direct impact on trade and FDI. As trade relations between Mexico and Japan show, there have periods of expanded trade activity prior to the implementation of a cross-regional trade pact. Instead, a number of other variables play a key role in promoting trade and FDI such as the regulatory environment, fiscal policy, and physical infrastructure. Furthermore, cross-regional trade agreements present other new opportunities for the countries involved. Latin American and Asia-Pacific countries that sign onto inter-regional trade deals have access to other regional markets that may consist of larger economies, low cost producers, and more efficient production mechanisms.

Introduction

Trade relations between the Asia-Pacific and Latin America display a cooperative commercial relationship that continues growing stronger. Asia-Pacific and Latin American countries began integrating into the global economy by sealing intra-regional trade deals with their respective regional partners. Not long after, individual countries from both regions began forging economic cooperative relationships with non-regional trading partners on the other side of the Pacific. Today, trade deals have gone into effect between Korea and Chile; Chile and Brunei, Singapore, and New Zealand; China and Chile;[1] Japan and Mexico; Thailand and Peru; Taiwan and Nicaragua; and Panama and Singapore. Furthermore, Japan and Chile as well as Taiwan, El Salvador, and Honduras have completed trade negotiations and signed a free trade pact. The construction of a commercial bridge across the Pacific between Latin America and Asia-Pacific countries remains underway, for example Singapore and Peru and Taiwan and the Dominican Republic are currently negotiating a bilateral cross-regional trade accord. Additionally, China and Chile began FTA talks on services trade and investment in January 2007. Vietnam and Chile began free trade negotiations in March 2007. The cross-regional trade arrangements between the Asia-Pacific and Latin America raise the question as to what this could mean for both regions economically.

The Asia-Pacific region offers Latin American exporters a large, continuously growing regional market. Latin America, on the other hand, presents the Asia-Pacific with the opportunity to access the larger Western Hemisphere market through the various trading blocs and bilateral accords that exist throughout the region as well as the potential for a Free Trade Area of the Americas (FTAA). The FTAA, which was supposed to take effect on January 1, 2005, will form a trading bloc that consists of all of the countries in the Western Hemisphere except for Cuba. Both sides continue to promote economic cooperation across the Pacific. Speaking at the Inter-American Development Bank (IDB) Annual Meeting in Okinawa, Japan in 2005, Asian Development Bank President Haruhiko Kuroda explained:

> There is further scope for trade cooperation between Asia and Latin America for the mutual benefit of each other. First, Asia, with some of the most dynamic economies in the world, provides a large and growing market for Latin American products. Although Latin American economy is less that half the size of Asia's, its growth performance has improved recently, and the prospect of a Free Trade Area of the Americas holds out a possibility of an increase in market size there as well.

The ever growing shift towards cross-regionalism between Asia-Pacific countries and Latin America has been overshadowed by discussions and analyses of the growing number of bilateral trade agreements within each of the two regions. In the last decade, various scholarly works on both Latin America and Asia have offered explanations about the growing trend towards the *new regionalism*, which describes renewed efforts by Latin America and relatively new attempts by Asia-Pacific countries to form effective regional trading blocs (Devlin and French-Davis 1998; Pizarro 1999; Devlin and Estevadeordal 2001; Lincoln 2004; Mehta and Kumar 2004; Eden 2006; Scollay 2006). As a result, there are limited studies on the cross-regional trade patterns.

However, the cross-regional trend is slowly making its way to the forefront of debates. The Council of the Americas sponsored a day long conference entitled *Building Global Competitiveness: the Asia-Latin America Connection* in October 2006. The conference addressed the question of whether Asia and Latin America were global partners or global competitors as well as the economic and financial implications of the growth of China and India for Latin America and the Caribbean. The panelists discussed the growing number of FTAs between the two regions. For example, IDB Executive Director of Japan and Korea Tsuyoshi Takahashi described Japan's FTAs with Mexico and Chile and how the country seeks to strengthen and develop new partnerships with other Latin American countries. IDB Principal Advisor of Integration and Regional Programs Antoni Estevadeordal described China as a partner to Latin America through trade and investment linkages such as FTAs as well as the G-20 and the WTO. Additionally, other specific issues pertaining to the growing inter-dependence between Latin America and Asia are also emerging such as SME participation in trade between the two regions (ECLAC 2006).

Although, such accords are receiving more attention, they are not new when we look at those formed between Asia and Latin America. In fact, this trend began during the same time scholars mainly focused on *new regionalism*. The Asia-Pacific Economic Cooperation (APEC) formed in 1989. APEC economically linked developed and developing economies in Australia and New Zealand, the Americas, and Asia. Mexico joined APEC in 1993; Chile, 1994; and Peru later joined in 1998. APEC continues operating in order to meet its goals of free and open trade and investment in the Asia-Pacific by 2010 for developed economies and 2020 for developing economies.

The Mexico-Japan FTA serves as a useful case for a detailed examination of cross-regionalism in terms of trade and FDI flows. Based upon this case, I find that cross-regional FTAs increase trade and FDI; provide market access to larger, developed economies; allow developed economies to export to smaller markets with cheaper labor; and expand regional market access. At the same time, this argument does not claim to draw a direct link between cross-regional FTAs and FDI and trade. Other factors such as the regulatory environment, transparency, tax systems, and physical infrastructure impact both trade and FDI flows. Nevertheless, cross-regional FTAs play an important role in expanding trade and providing additional investment opportunities and sources.

Perspectives on Regional Trade Agreements

Much of the scholarly work on Latin America and Asia's trading arrangements fall short of in-depth analyses on *cross-regionalism* itself. This remains the case despite the growing existence of cross-regional agreements across the Pacific. A number of regional studies include a description of the cross-regional trend yet within an overall focus on regional bilateral and multilateral free trade agreements. Consequently, regional trade studies fail to strongly emphasize the growing trend towards establishing cross-regional trade areas through formal agreements.

OECD representatives Oliver Solano and Andreas Sennekamp acknowledge the cross-regional trade agreements in a March 2006 paper. However, the brief mention of these types of trade accords fit into a larger working paper on the competition provisions within regional trade agreements. Solano and Sennekamp only discuss cross-regional trade agreements to show that the distinction between two types of competitive provisions that exist in intra-regional trade deals – rules to curb anticompetitive behavior or provisions to encourage coordination and cooperation – becomes blurry with inter-regional trade accords. As a result, very minimal attention is paid to the significance of cross-regional accords and how findings towards RTAs may or may not be applicable to such agreements.

Another illustrative example of the minimal focus on cross-regional trade agreements can be found in an Asian Development Bank report entitled, *Asian Development Outlook 2006*. The report mentions the number of cross-regional agreements that Asian countries are pursuing. The brief discussion takes place within the overall context of the rise in bilateral agreements. The reader learns that cross-regional trade arrangements are important for exporting final products to other significant markets outside of the region, are driven by the need for energy security via access to mineral and natural resources, and occur purely out of political motivation. On the other hand, the brief description does not include empirical evidence that underscores the unique impact that these types of agreements may have on member countries.

More recent debates continue to focus mainly on the benefits and drawbacks of regionalism[2] whereas earlier pieces focused on explaining regionalism in Latin America and Asia. One side maintains that regionalism is insufficient for addressing the challenges of liberal trading regimes. Instead, a multilateral framework appears more useful. For example, at an Inter-American Development Bank conference,[3] Director of Brazil's Institute for International Trade Negotiation (ICONE) Marcos Jank contended that multilateralism remains better equipped than RTAs to solve the number of systemic challenges that arise such as agricultural subsidies and government procurement. The other side of the debate critiques the multilateral system as a flawed institution while pointing to the successes of regionalism. For instance, the former Deputy Director-General of the WTO Miguel Rodríguez Mendoza maintained that the multilateral system remains "inadequate" and fails to reflect the complexities of both multilateral arrangements and regional agreements." Mendoza suggested the use of a single framework that combines those mechanisms within both the multilateral and regional systems that are actually working.

History of Latin America and Asia Trade Relations

What is now labeled old regionalism refers mainly to market access programs, in which a fixed preferential tariff applied to specific products or industries during the 1960s and 1970s.[4] Old regionalism trade regimes were limited and restrictive. For instance, the 1965 Auto Pact between the United States and Canada removed barriers to trade only in auto and autoparts (Eden 2006, 2). Throughout Latin America, the old regionalism served as a regional form of import substitution industrialization (ISI) strategy, in which regional economic arrangements between certain countries in Latin America reduced trade and investment barriers amongst themselves while maintaining high barriers to trade and investment to outsiders, including other non-member Latin American countries (Eden 2006, 2). These efforts to promote regional trade cooperation functioned in a tepid manner such as lowering tariffs in weak or nonexistent domestic industries and intensifying the use of quotas and import licenses (Eden 2006, 3-4). Illustrative examples of partial trade liberalization include the Central American Common Market (CACM), the Latin American Free Trade Area (LAFTA),[5] the Andean Group, and the Caribbean Community (CARICOM). The highly protectionist motives behind these arrangements resulted in limited gains for the region as a whole (Blomström and Kokko 1997; Devlin 2000; Eden 2006).

The 1990s, after a decade-long lapse in the move towards regionalism, altered our understanding of regionalism because of the distinctive characteristics of the newly formed trade liberalization accords. *New regionalism* supported a market-oriented trade policy over the protectionist policies of earlier regional integration efforts. Beginning with Mercosur in 1991 and followed by NAFTA in 1994, Latin America began the process of the *new regionalism*. MERCOSUR and Mexico adopted measures favoring market liberalization through lower or common external tariffs, the removal of quotas, and the elimination of import licenses. Additionally, many Latin American countries embraced the NAFTA model, which advanced towards the quick, automatic, and nearly universal elimination of tariffs (Estevadeordal 2003).

On the other side of the Pacific, Asian countries ostensibly partook of the new regionalism ideology. Observers of economic integration in East Asia have been perplexed by the region's shift from no regionalism towards the new regionalism. Despite the geographical proximity of East Asian countries,[6] the regional countries failed to integrate. Economist Edward J. Lincoln attributes the disappointing integration results to the diversity that exists throughout the region (2004, 15-16). That changed in 1989 with the formation of APEC. "Something was stirring across East Asia in the opening years of the 21st century. A region that had been notable for its lack of internal economic links over the previous 50 years was talking actively about regional cooperation," writes Lincoln (2004, 1). By 1991, APEC committed to a long-term goal of free trade and investment through lower trade barriers, reduced costs of conducting business in the region, and trade facilitation (i.e. human resource development, promoting a stable business environment, strengthening small and medium-sized enterprises, and utilizing modern technology) (Lincoln 2004; Scollay 2006). As a matter of fact, APEC went beyond the preferential liberalization that was characteristic of new regionalism by adopting the non-discriminatory trade practices that are encouraged under the multilateral regime.

RTAs lead to increased FDI inflows into countries, according to empirical studies. The case of Mexico supports these findings. The Latin American country experienced much higher levels of FDI inflows after signing NAFTA compared to FDI inflows throughout the rest of Latin America (Globerman 2002; Monge-Naranjo 2002). Countries within ASEAN +3 and the EU also result in similar findings. ASEAN +3 and EU member countries experienced increased FDI inflows after joining these regional trading blocs (Tayyebi and Hortamani). This basic argument has led observers to conclude that if countries join RTAs, they would benefit from increased FDI inflows. For example, Yeyati, Stein, and Daude (2002) predicted that if the other Latin American countries joined the Free Trade Area of the Americas, they would experience greater inflows of FDI.[7]

Contrary to earlier evidence, FDI may not necessarily be driven by membership in an RTA alone. Some countries received increasing FDI prior to joining an RTA, as in the case of Mexico. FDI inflows into Mexico from the United States were on the rise during the 1980s. During this period, Mexico opened its market, enacted trade policy reforms, and joined the General Agreement on Tariffs and Trade (GATT). The flow of FDI from the United States continued during and after the NAFTA negotiations. Economists Magnus Blomström and Ari Kokko contradict the basic idea that RTAs automatically lead to higher levels of FDI inflows for a country. Instead, they turn to economic and regulatory policy reforms as possible explanations for a country's ability to attract more FDI from within.

> The timing and character of the changes in the U.S. investment position suggest that NAFTA has perhaps not been the main determinant of the upswing in U.S. investments in Mexico. An equally important stimulus must have been the comprehensive reforms of the country's FDI regulation that commenced already in the mid-1980s and eventually culminated with the NAFTA (Blomström and Kokko 1997, 30).

Asian case studies further advance the argument that FDI may be driven by economic and regulatory policy reforms. China's shift from being a country completely closed to FDI post-WWII throughout the 1970s towards an economic environment more open to FDI by the early 1990s resulted in an influx of FDI into the country. "Even if investors are becoming discouraged by the policy environment currently prevailing in China, the emergence of China as a major host nation to FDI has nonetheless been driven by positive changes in Chinese policy over the last quarter century or so" (Graham and Wada, 6). These inflows came about before China joined an RTA.[8]

While valuable, these earlier premises fall short of taking into account the role of physical infrastructure. Physical infrastructure refers broadly to a country's transportation and communications systems. Weak customs facilities, poor transport and telecommunications mechanism, inadequate services for importers and exporters, and opaque information systems act as bottlenecks to conducting business efficiently. As a result, investors may be deterred from investing in a particular country, thus limiting that country's FDI inflows (Thomas, Nash, et. al. 1991; *World Bank* 2006).

The efforts of developing countries to modernize their physical infrastructure produce a business environment that requires less time to operate and reduces transaction costs. Therefore, the improved business environment makes the country more attractive to foreign investors. In the case of China, the development of its physical infrastructure elicited an efficient business environment that reduced the trepidations of foreign investors. Therefore, China began to lure immense amounts of FDI (Davies 2003; OECD 2006).

On the other hand, critics have charged RTAs with FDI diversion. RTAs can also have the reverse effect on attracting FDI. They can remove investment away from a country that has the most comparative advantage, other regions within the global community, and away from those countries with smaller market sizes. Blomström and Kokko warn that:

> Although the underlying assumption is that increased FDI inflows are beneficial to growth and development

> in the integrating region, it should be recognized that the welfare effects on the region may in fact be negative if the RIA [Regional Integration Agreements] worsens the allocation of resources or adds new distortions, e.g. in the form of higher average protection of the regional market. In addition, the welfare effects on the rest of the world may be negative if the RIA diverts investment from other countries to the region in question (1997, 4).

Furthermore, RTAs cause the unequal distribution of FDI to countries within the region because of different location advantages (Blomström and Kokko 1997), financially stable economies, larger population size, and a more educated labor force (Jaumotte 2004). These distortions reduce the full potential benefits of the RTAs for all member countries.

RTAs have also been known to increase reciprocal trade flows within a region and globally. In many cases, countries joined RTAs and experienced augmented market access. The increase in total exports has also been notable in the CARICOM Single Market Economy (CSME), which stood at 13 percent during the early 1990s and jumped to 20 percent towards the end of the same decade (World Bank 2005, 66). Between 1990 and 2002, intra-regional export shares for the Andean Group improved greatly from 4.2 to 11.2%; Mercosur, 8.9 to 20.8%; and ASEAN, 19 to 22.4% (Mehta and Kumar 2004, 11). Finally, Mexican exports, especially to the United States, multiplied tremendously after signing NAFTA in 1994 (Blomström and Kokko 1997, 27-8; Monge-Naranjo 2002, 8, 38-40).

The links between RTAs and trade would lead one to predict that signing RTAs will produce expanded reciprocal trade relationships. During the 1990s, Chile began integrating into the international economy via negotiating bilateral agreements. Chilean President Patricio Aylwin anticipated a boost in trade both regionally and internationally through such agreements. According to ECLAC Economic Affairs Officer Verónica Silva, "The adoption of FTAs, as an effective instrument for market access and for diversifying Chilean exports, could also sustain the liberalization process. In particular, FTAs with other Latin American countries of similar development would facilitate the export of Chile's goods and services…" (Silva 2004, 31-2).

Other cases of regional RTAs prove an anomaly to the link between RTAs and increased trade. Some regions have completed RTAs yet continue to demonstrate low intra-regional and international trade levels. For example, intra-regional trade among members of the South Asian Association for Regional Cooperation (SAARC), which plans to establish the South Asian Preferential Trade Area (SAPTA), remains low at only 4.9 percent of total trade (Mehta and Kumar 2004, 9). Additionally, Caribbean products have lost a significant amount of market share outside of the region, even though intra-Caribbean trade showed significant improvement in the 1990s (*World Bank* 2005, 64). Similar cases have led observers to identify other mechanisms for increased trade.

Economic and political reforms of RTA countries reduce barriers to trade. Economic reform involves the removal of tariff and non-tariff barriers. Such economic reform remains crucial to enhancing regional trade (Thomas, Nash, et. al. 1991). Political reform is necessary to reduce those protectionist pressures that frustrate the liberalization process (Naim 1993 as cited in Echavarría and Gamboa 2004; Winters 1996, 57; Heydon and Lee 2006, 3-4). Quelling protectionist influence allows for liberal forces to encourage the transition towards open market economies and participate in regional and global trade.

Additionally, RTAs have been criticized, first of all, for distorting trade benefits within the region. Regional protectionist blocs function as the hub and spoke of a wheel. The hub country has a separate bilateral agreement with two other countries, or the spokes. Whereas the hub has preferential access to two markets, the spokes only have preferential access to one market, which is that of the hub country. At the same time, the spokes are denied preferential access to each other's markets, because they do not have an agreement between themselves (Eden 2006, 3). Accordingly, the hub country receives more of the benefits of the RTAs (i.e. trade expansion) than the two spoke countries (Eden 2006, 3).

Secondly, RTAs receive criticism for its ability to divert trade. RTAs can divert trade globally. These regional arrangements can cause member countries to mainly trade within a specific regional bloc because of the guarantee of preferential access. In effect, these same countries ignore other countries that may be able to provide goods a lot cheaper and more efficiently.[9] Furthermore, RTAs divert trade within a region. High cost, inefficient producers attract the most trade because of their ability to import a lot of cheap goods from within the regional market. Simultaneously, low-cost/more efficient producers lose out when exports are geared towards higher-cost/less efficient producers (Fisher 2006, 3-4; Griswold 2003; Winters 1996, 57).

Multilateralism may alleviate many of the challenges associated with RTAs. The multilateral system provides an overarching framework that reduces the domestic pressures within member countries (Mattoo 2002, 285) and promotes non-discriminatory tariff preferences (Michalopoulos 2002, 62). In other words, all countries can truly benefit from the multilateral system, because it lays out a standards set of rules applicable to all members.

With the shift towards an outer regional focus, the question arises as to whether or not the results are the same when applied to the economic cooperative framework and deeper linkages between Asia and Latin America.

A Cross-Regional Free Trade Agreement - Mexico-Japan FTA

Mexico and Japan illustrate the cooperative commercial relationship that has emerged between Latin America and Asia-Pacific countries. The two countries have gone beyond regional boundaries to form a cross-regional free trade area. Japan joined the General Agreement on Tariffs and Trade in 1955, and Mexico became a part of GATT in 1986. Since becoming a GATT member, Mexico signed 11 free trade agreements with 42 countries, eight of which were RTAs.

Japan, on the other hand, had signed a free trade pact with only one other country – Singapore – in 2002. By 2003, both countries realized the benefits of a bilateral trade accord that extended across the Pacific. As a result, Japan and Mexico negotiated a free trade deal that would allow each country access to different regional markets.

The Mexico-Japan Free Trade Agreement was signed on September 17, 2004 at the National Palace in Mexico City. The FTA's objectives are to promote a free trans-border flow of goods, person, services, and capital between the two countries and improve the business environment and bilateral cooperation in areas such as education, training, and support for small and medium enterprises. The agreement took effect on April 1, 2005.

With the FTA, Japan currently has preferential access to the Mexican market in a number of areas. Mexico agreed to immediately eliminate tariffs, which ranged from 18-30 percent, on imported Japanese games, motorcycles, and musical equipment. Furthermore, tariffs on car imports from Japan will be reduced to zero by 2012, and quota restrictions will be looser on these same imports. In addition, Mexico committed to abolishing duties on Japanese steel products by 2015 (*Mexico Reports Agreement on Substance of Japan Trade Deal* 2004; Japan, Mexico Reach FTA 2004).

Japan, in return, allows preferential access for Mexican goods. Japan agreed to the immediate removal of tariffs on 91 percent of Mexican goods (Landauro 2004). Moreover, Japan committed to lowering import tariffs on the majority of Mexican produce over a three to seven year period. Import tariffs on bananas will be lowered by 2015.

In addition to preferential access, the trade pact guarantees non-discriminatory practices. Mexico and Japan agreed to ensure fair trade practices under the cross-regional agreement. Both sides would apply the same tariffs rates on imported goods as those offered to each other's most favorite trading partner. These are the same principles offered under the WTO Most Favoured Nation provision.

Foreign direct investment between the two countries remained low prior to the signing of the Mexico-Japan trade accord. In 2003, less than one percent of Japan's total FDI outflows went to Mexico, whereas Mexican investment in Japan remained at zero (JETRO) (Table 1).

Mexico anticipates that the trade deal will boost Japanese investment in Mexico. Mexico expects to attract US$1.2 billion annually in Japanese investments (Mexican Embassy 2004). This expectation does not appear unrealistic given that Japan has invested a lot more money in Mexico recently. Mexico's chief trade negotiator, Angel Villalobos, stated that Japan's direct investment into Mexico jumped up to US$1.1 billion in 2005 and has reached more than US$900 million between January and April of 2006 alone (Japan Investment in Mexico to Top $1.2B 2006).

Table 1: **Japan FDI outflows 1999-2004 (US$million)**

Japan FDI outflow	1999	2000	2001	2002	2003	2004
Mexico	$1,483	$208	$46	$84	$140	$337
Total FDI	$67,502	$49,034	$32,297	$36,858	$36,092	$35,548

Source: Economic Commission for Latin America and the Caribbean 2005

Over the last decade, Mexico has mainly utilized FDI in its manufacturing sector. However, between 2001 and 2003, the majority of Mexico's distribution of FDI shifted away from the manufacturing towards the services sector. ECLAC attributes the shift in FDI to major changes in the ownership of Mexico's largest local banks (ECLAC 2005, 23).[10] By 2004, the manufacturing sector received the majority of FDI inflows once again. This time the distribution of FDI for the manufacturing and services sectors was almost equal (Table 2).

Table 2: **Mexico Distribution of FDI by Sector 1996-2005 (percentage)**

Mexico FDI	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	100	100	100	100	100	100	100	100	100	100
Manufactures	61.4	60.3	61.5	67.2	56	22.3	39.8	43.1	49.9	58
Natural resources	1.5	1.2	0.9	1.6	1.6	0.3	1.9	0.8	0.8	0.7
Services	37.1	38.5	37.6	31.3	42.4	77.4	58.3	56.1	49.3	41.3

Source: Japan External Trade Organization

The trade deal exhibits a great opportunity for Mexico to receive extra foreign investment into its manufacturing sector from Japan. Japan seeks to augment its exports of autos, steels, and electronics to the Mexican market. Japanese investment in Mexico's manufacturing sector has already risen quickly since the trade accord went into effect. For example, the Japanese car companies of Nissan invested US$1.3 billion to create a new compact model; Toyota, US$160 million to expand its first Mexican assembly plant that makes the Tacoma pick-up model in Tijuana; and Bridgestone tire company, US$220 million towards setting up a plant in Nuevo León (ECLAC 2005, 24). These investments help Mexico reduce its reliance upon the U.S. FDI, which accounted for 66 percent of Mexico's total FDI inflows in 2005 (ECLAC 2005, 24, 39).

Concurrently, the agreement presents an opportunity for Japanese products to reach the larger North American market. In 2000, the Japan External Trade Organization (JETRO) described the Mexican market as important for allowing Japanese industries to "secure a foothold in the North American market" (JETRO 2000, 3). Five years later, Japan gained preferential access to 24% of the North American market's population, which includes 427.7 million people; and 5% of the North American economy, which has a total GDP of US$13 trillion.[11]

Japan is already taking advantage of the agreement to access the rest of the North American market. Japanese car companies are manufacturing contemporary models in Mexico. These cars are later marketed in the other North American countries. For instance, the money that Nissan invested into Mexico for the manufacture of its new compact model was for the purpose of selling it in the United States (ECLAC 2005, 24).

Despite earlier acknowledgements of investment opportunities in Mexico, Japanese investors expressed concerns

about investing in Mexico. The Mexican regulatory environment obstructed capital inflows from foreign investors in certain sectors, maintained state control over particular industries, and its physical infrastructure remained weak and inefficient. For example, JETRO listed Mexico's restriction on foreign investment in the financial, oil, and petrochemicals sectors; problems with the tax and accounting systems; the lack of support for local autoparts and electronic and electric parts; and underdeveloped transport-related infrastructure as significant investment barriers (JETRO 2000, 6). These challenges created an extra burden and augmented the costs of doing business in Mexico. Consequently, Mexico received less FDI from Japan.

Mexico has made limited progress in correcting for the flaws in its business environment. First of all, Mexico made reforms within its financial services sector, including opening the industry up to outside investors. However, the industry is still plagued by an inefficient banking sector, a high level of non-performing loans, and a complex regulatory framework, which hinders growth (Bonturi 2002; OECD 2005). On the other hand, Mexico has not reformed its policies pertaining to the petroleum sector. The Mexican oil industry remains closed to foreign investment. Secondly, Mexico was encouraged to undertake tax reforms that would ease fiscal constraints and provide revenue to finance the proper level of spending and long-term investment needs (OECD 2005). It has since reduced the corporate income tax from 33 percent in 2004 to 29 percent in 2006 (*World Bank 2006a*). Finally, Mexico sustains a poorly run transportation system that leads to high transportation costs (Peña 2004; Zúñiga 2005). These challenges will have to be addressed so that Japanese investor and Mexican business can fully benefit from the cross-regional bilateral FTA.

Much like FDI, trade between Japan and Mexico reached minimal levels before the trade pact. In 2003, less than one percent of Japan's total trade was with Mexico. Mexico has already experienced growth in the Japanese market. From 2003 to 2005, Japanese imports of Mexican goods increased by 43 percent. From 2004 to 2005 alone, Japan imported 17 percent more of Mexican products (Table 3).

Table 3: **Trade between Japan and Mexico 1998-2005 (US$million)**

Japan to Mexico	1998	1999	2000	2001	2002	2003	2004	2005
Exports	$4,209	$4,406	$5,211	$4,087	$3,766	$3,643	$5,190	$6,881
Imports	$1,229	$1,661	$2,388	$2,008	$1,791	$1,781	$2,174	$2,542
TOTAL	**$5,438**	**$6,067**	**$7,599**	**$6,095**	**$5,557**	**$5,242**	**$7,364**	**$9,423**

Source: International Monetary Fund, *Direction of Trade Statistics Yearbook 2005/ June 2006*

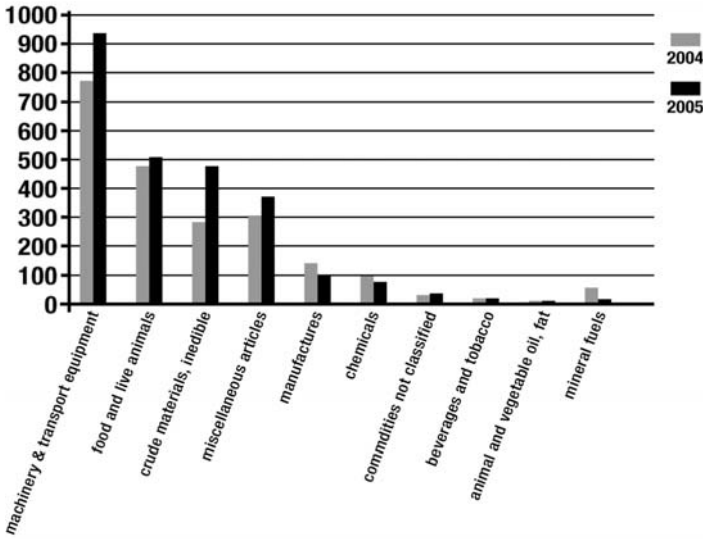
The trade pact affords both sides the opportunity to diversify their export markets. Mexico was the world's 12th largest global market in 2003 and Latin America's largest market economy with a GDP of US$684 billion.[12] Now, Japan has preferential market access to the prominent Mexican market. Additionally, Japan will have tariff-free access to Mexico's other free trade partners if it opens up factories in Mexico (*Mexico, Japan sign free trade agreement* 2004). Likewise, Mexico can diversify its export market by gaining access to the world's third largest global market.[13] Mexico will also have entry into the Asia via the region's largest market economy with a GDP of US$4.6 trillion.

On a cautionary note, the increased trade flows between Mexico and Japan by 2005 cannot be directly attributed to the cross-regional trade agreement itself. Figures before the trade negotiations illustrate expanding trade between the two countries. From 1998 to 1999, Mexico-Japan trade had risen 12%, and from 1999 to 2000, 25%. The growing trade could be ascribed to a number of related factors. Those factors include, *inter alia*, the reduction of tariff barriers to outside exports and the growth of domestic demand for goods from either country. Afterwards, trade decreased annually from 2000 to 2003 (Table 3).

Furthermore, Mexican-Japan trade has demonstrated the opportunity to expand specific domestic industries that are competitive in each other's market. Mexican agricultural goods and manufacturing inputs grew within the Japanese market. According to Mexico's Ministry of Foreign Affairs (SRE), close to 80 percent of total Mexican sector exports to Japan consisted of machinery, transport equipment, food and live animals, and inedible crude materials in 2005. The latter export showed the largest annual export growth rate (2004-2005) at about 75 percent (Figure 1).

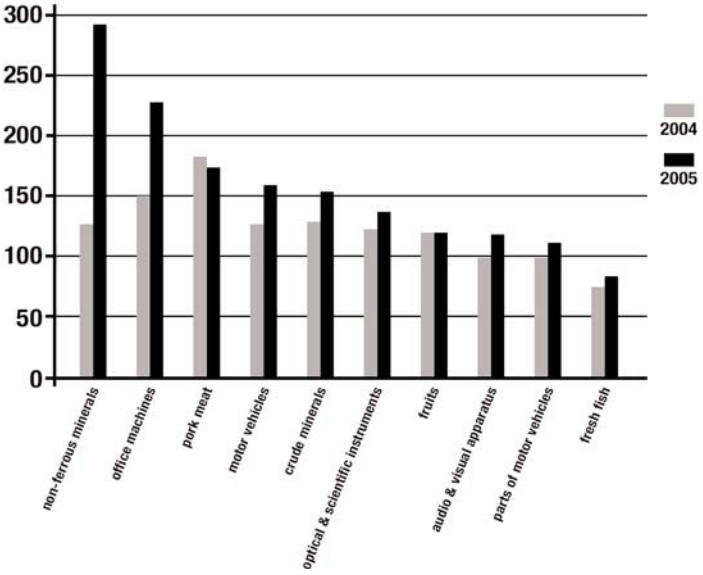
The products that Mexico has exported to Japan in the last couple of years emerge from the main export sectors. Mexico's top exports to Japan in 2005 were of nonferrous minerals, which accounted for 12% of total exports to Japan; office machines, 9%; and meat of pork, 7%. Nonferrous minerals exhibited the largest growth rate between 2004 and 2005 of 137 percent (Figure 2). Mexican farmers have the privilege of exporting 80,00 tons of pork and 6,500 tons of orange juice per annum to Japan under the accord's preferential tariffs (*Japan, Mexico Reach FTA*).

Figure 1: **Mexican exports to Japan by economic sector 2004-2005 (US$millions)**



Source: Ministry of Foreign Affairs (Mexico)

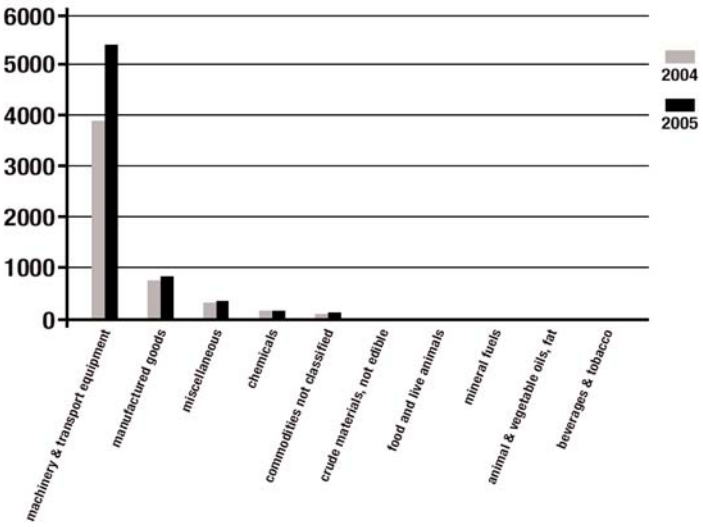
Figure 2: **Mexican exports to Japan by main products 2004-2005** (US$millions)



Source: Ministry of Foreign Affairs (Mexico)

The possibility of identifying various industries that would benefit from the trade pact also rests with Japan. The main Japanese sector that experienced export growth in the Mexican market was the manufacturing sector. Machinery and transport equipment and manufactured goods accounted for a little over 90 percent of Japanese exports to Mexico. Of these exports, 78 percent consisted of machinery and transport equipment (Figure 3).

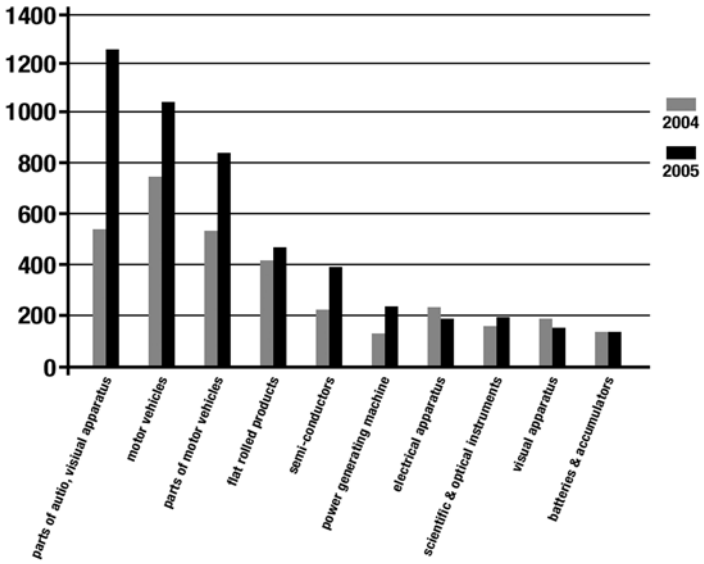
Figure 3: **Japanese exports to Mexico by economic sector 2004-2005** (US$millions)



Source: Ministry of Foreign Affairs (Mexico)

The top Japanese products that have proven successful in the Mexican market are from within the manufacturing sector. In 2005, Mexican demand for Japanese goods rested with audio and visual products, which demonstrated a 131 percent annual growth rate from a year before. Motor vehicle exports ranked second in the most shares of the Mexican market during the same year (Figure 4).

Figure 4: **Japanese exports to Mexico by product 2004-2005** (US$millions)



Source: Ministry of Foreign Affairs (Mexico)

In sum, the cross-regional FTA between Mexico and Japan functions in the same manner as both RTAs and the multilateral system. Although the agreement operates outside of a geographically contiguous trading area, the trade pact remains reciprocal. Both sides have agreed to tariff schedules or the complete elimination of duties on those specified goods. Additionally, quantitative restrictions (i.e. quotas) had been eased on specific goods. Furthermore, the agreement adopts the MFN provision, which is upheld by the WTO. The MFN provision guarantees equal treatment in terms of the application of tariffs on imported goods.

The agreement has demonstrated an increase in FDI and trade flows. Japanese investment in the Mexican market has surged since 2004, and trade between the two countries has grown in the double digits. Concomitantly, the higher levels of FDI and trade may not be the direct result of the signing of such an agreement. Instead, other associated factors such as business environment, regulatory reform, and physical infrastructure may play a more significant role in making a country much more attractive to foreign investors.

CONCLUSION

Cross-regional trade has been a growing trend between Latin America and Asia for a little over a decade thus illustrating the cooperative relationship between the two regions. The Mexico-Japan FTA has been valuable towards examining the impact of cross-regional FTAs on trade and FDI flows. Cross-regional agreements result in increased trade and FDI. However, the existence of such an agreement itself does not automatically result in trade expansion and increased invest-

ment. Rather, other factors such as improved regulatory systems and physical infrastructure allow countries to expand trade and FDI to the fullest under inter-regional trade agreements, which can also be said of intra-regional FTAs. Unlike intra-regional FTAs, cross-regional FTAs address concerns about FDI and trade diversion away from more efficient producers outside of the region. Inter-regional trade pacts allow member countries to look beyond regional borders and gain access to other regional markets.

ENDNOTES

1. The FTA between China and Chile is an agreement for trade only in goods.
2. For the purposes of this paper, multilateralism merely refers to the multilateral trading system (i.e. General Agreement on Tariffs and Trade (GATT) and the World Trade Organization (WTO)) while acknowledging that multilateralism can take place within regional trade agreements.
3. Third CEPII Conference: The New Regionalism: Progress, Setbacks, and Challenges, Feb. 9-10, 2006. Inter-American Development Bank, Washington, D.C.
4. Please see Devlin 2000; Devlin and Estevadeordal 2001; Estevadeordal 2003; and Burfisher, Robinson, and Thierfelder 2003 for more on the distinctions between *old regionalism* and *new regionalism*.
5. LAFTA became known as the Latin American Integration Association in 1980.
6. In Lincoln (2004), East Asia refers to East and Southeast Asian nations – Japan, South Korea, China, Taiwan, Hong Kong, Macao, the Philippines, Thailand, Malaysia, Myanmar, Singapore, Vietnam, Laos, Cambodia, Indonesia, Brunei, and Papua New Guinea. The small island nations in the South Pacific are excluded from the study.
7. The FTAA was still under negotiation at the time of Yeyati, et. al's analysis in 2002. The deadline for completion was Dec. 2004, but the FTAA negotiations are still stalled two years later.
8. Please see Globerman and Shapiro 2002 for more on the impact that governance infrastructure has on attracting U.S. FDI alone.
9. This argument based on studies of recent RTAs was initially highlighted by Jacob Viner in *The Customs Issue* (1950).
10. Under NAFTA, Mexico made a number of reforms within the banking sector. By the mid-1990s, the Mexican legislature passed a new banking law that reduced barriers of entry to U.S. and Canadian financial entities. U.S. and Canadian banks can now wholly acquire Mexican banks with certain restrictions.
11. Calculations based on World Bank figures for 2004.
12. These market size figures are based on 2004 numbers by the World Bank. Mexico has since fallen to the second largest Latin American economy behind Brazil.
13. The United States and the European Union are the first and second largest global markets respectively.

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ASEAN Regionalism: Growth Through Integration

by Richard Payne, M.A., M.A.P.S.

Abstract
With the rise of China and India, Southeast Asia risks turning into a backwater and its economies becoming marginalized by dominant regional powers. GDP growth and foreign direct investment are two economic indicators that show how far ASEAN is falling behind. Analysts argue that greater cooperation and economic integration could improve the economics of investment in ASEAN. Despite the formation of the ASEAN Free Trade Area in 1993, progress toward economic integration remains slow and intra-regional trade, as a percentage of the region's total trade, has even declined from 1994 to 2001. Adjustments need to be made. ASEAN should build economic integration by: 1) promoting regionalization and supporting private sector initiatives; 2) pursuing a multipolar strategy to integration; and 3) utilizing voluntarism as a core strategy in promoting integration.

With the rise of China Southeast Asia increasingly risks turning into a backwater and its economies becoming dominated by stronger regional powers.[1] Free trade agreements are increasingly seen as the panacea to the risk of ASEAN[2] marginalization. A *Financial Times* article reports that "China on Sunday signed an agreement with the Association of Southeast Asian Nations that promises to open up key service sectors as the two partners move towards creating what could be the world's biggest free-trade zone. The deal is seen as a vital step towards the establishment by 2015 of a China-ASEAN free trade area. Such a zone would bring together China's 1.2 billion people and Southeast Asia's 500 million citizens into a single market."[3]

Is such a free trade area possible and would it indeed fulfill the lofty expectations of its promoters? The realization of economic integration and its expected benefits are far from certain. This article looks at Southeast Asia's economic performance and the role that economic integration has and can play. It reviews proposals for greater economic integration and offers its own perspective to greater economic growth through economic integration.

ASEAN Economic Performance

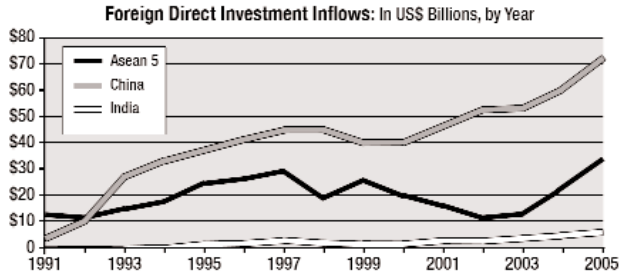
The average annual real GDP growth rate for the original five ASEAN countries[4] has lagged behind China and India for most of the last 15 years. From 1990 to 2006, the "ASEAN 5" countries on average have grown just over five per cent per annum, while India has increased over six percent and China over nine percent, during the same period. The economic crisis of 1997 was a critical turning point. While ASEAN growth plummeted and took many years to recover, China continued its robust growth and India emerged as a new force within the region.

Since 2003, the economies of India and China have overshadowed those of ASEAN. From 2003 to 2006 China experienced growth of 10.2% per annum and India achieved 8.5%

annual growth. The ASEAN 5 secured a 5.7% average annual growth during the same period.

High growth, a huge market, supportive government economic policies and an increasingly competitive manufacturing base have made China extremely attractive to foreign investors. In 1992 the ASEAN 5 and China attracted similar amounts of foreign direct investment (FDI).[5] From 1992 until 1997, FDI inflows rose rapidly in both ASEAN and China, although China's growth in FDI inflows outstripped the ASEAN 5. In 1997, FDI inflows into China reached US $45 billion while the ASEAN 5 attracted US $30 billion in FDI inflows.[6]

Since 1997, the situation has changed dramatically. ASEAN's 1997 economic crisis and its slow recovery made foreign investors wary of putting more funds into the region. Meanwhile, China's continued economic resurgence made it highly attractive to foreign investors. By 2002 annual FDI inflows into China reached US $52.7 billion while FDI inflows into the ASEAN 5 slid from nearly US $30 billion in 1997 to US $12 billion in 2002 (coincidentally, the same level as in 1992). Since 2002, FDI inflows have recovered to US $34 billion in 2005,[7] but FDI in China has also continued its remarkable rise. FDI inflows into China in 2005 reached nearly US $72 billion.



While foreign direct investment in India has remained modest as compared to ASEAN and China, the increase in FDI inflows has been significant in recent years. In the 1990s foreign direct investment started to grow in fits and starts. From 1992 to 1995 FDI inflows grew by over 130% per annum from a small base of US $75 million in 1991. This growth was short-lived. A slowdown and then net outflow occurred in the late 1990s. The new century brought greater stability. From 2002 to 2005 foreign direct investment to India rose 24% per annum and reached US $6.6 billion in

2005. This is considerably more than any single ASEAN country, other than Singapore.

Is ASEAN Under-Performing?

The economic and investment growth in Asia's two giants combined with ASEAN's 1997 economic crisis and slow recovery have sparked concern that its much larger neighbors will dwarf the region and marginalize its economies.[8] The world's focus seems to be on China and India with little attention being paid to the disparate, fractious and smaller economies of Southeast Asia.

Yet, the facts show otherwise. ASEAN is by no means destined to low growth and marginalization. While growth in ASEAN has not matched the spectacular levels of China and India, the ASEAN economies have performed reasonably well, especially since 2003. Singapore stands out at the top with nearly 8% annual growth from 2004 to 2006. The city-state's impressive economic growth and rise in foreign direct investment is the result of its efforts to identify and capitalize on niches where it has a competitive advantage. The other four original ASEAN members achieved GDP growths of 5-6% in the same period. While these growth rates are down from the boom years of the 1980s and early 1990s, they are still quite respectable.

Opportunities abound for ASEAN to capitalize on growth in China and India. Investors in China, both from the West and from Southeast Asia, have for many years used skilled and experienced executives from Southeast Asia to jump-start their operations in China. In addition, these companies have identified areas of complementarity in manufacturing between Chinese and ASEAN factories. Plants in Southeast Asia now supply components to Chinese factories where they have a competitive advantage.

Tourism and business services are two more areas where Southeast Asia can benefit from China's increased prosperity. Thailand in particular has put out the welcome mat and has enticed more and more visitors from China, Korea and Japan to its many tourist attractions. Singapore also has seen tourism rise, with 2006 setting records virtually every month for number of overseas visitors. Chinese visitors already account for the second highest number of any nationality to Singapore. With the construction and opening of new convention centers and casinos, Singapore is on course to build on its position as a top tourist destination in Asia.

Some analysts argue that greater cooperation and economic integration could improve the economics of investment in the region.[9] Removal of barriers to the free flow of goods, services and people would improve efficiency within the region and open new opportunities in a host of areas beyond just manufacturing. Coordination of policies on investment and greater cooperation in education could improve the attractiveness of the region as a whole to investors.

Economic Regionalism

Theory of Economic Integration

Béla Balassa, a professor at the Johns Hopkins University, first proposed the "Theory of Economic Integration" in 1961.[10] He described economic integration as a continuum that falls into six stages:

1. **Preferential Trading Agreement** (PTA). Preferential trading areas are often between neighboring countries and frequently cover only a single product category (e.g. the Canada-United States Automotive Agreement).
2. **Free Trade Area** (FTA). Preferential trading areas (PTAs) often evolve into wider free trade areas (FTAs) that eliminate tariffs and non-tariff barriers across most product categories. The North American Free Trade Agreement (NAFTA) is at this stage on the continuum.
3. A **Customs Union** eliminates tariffs among member states and establishes common tariffs on imports from the rest of the world. The Gulf Cooperation Council[11] (GCC) and Mercosur[12] are examples of customs unions.
4. A **Common Market** "establishes free trade in goods and services, sets common external tariffs among members and also allows for the free mobility of capital and labor across countries."[13] The European Union would be an example of Balassa's definition of a common market.
5. An **Economic and Monetary Union** is a common or "single" market with a common currency. The only existing economic and monetary union is the Eurozone within the European Union.
6. **Complete Economic Integration** entails centralized economic and monetary control where the individual states within the union have little control over economic policy. The former Soviet Union is an example of this stage of economic integration.

The theory of economic integration argues that economic integration will stimulate increased intra-regional investment and trade. A free trade area has more impact on economic activity than does a narrow preferential trade agreement. In turn, a common market, or better yet, a single market with a common currency has much greater economic benefits than does a free trade area. The more firmly integrated a region becomes, the greater the benefits accruing to businesses in that region.

Model for Economic Integration

The European Union is the model case study for the continuum of economic integration. The European Coal and Steel Community (ECSC) was established in 1951 as a preferential trade agreement to pool the steel and coal resources of member countries. The ECSC served as the foundation of the European Economic Community (EEC), which was formed in 1957. Over the next 35 years, the EEC gradually evolved from a free trade area into a common market with a strong centralized administration. The Maastricht Treaty signed in 1993 further strengthened ties among member states and set out an ambitious goal for an all-encompassing European

Union (EU). The next phase of economic integration, an economic and monetary union, was reached with the formation of the European Central Bank and the adoption of the euro in 1999. Complete economic integration remains an aspiration, despite the many obstacles that still remain in its the path.[14]

Both the EU and NAFTA must be considered a success of economic integration. The two agreements have led to sharply increased investment and trade. Over time, the ties among the countries in both groupings have strengthened enormously. Plus, accession to the grouping has proven to be a big lift to the economies of new entrants. NAFTA stimulated investment, helped boost exports and led to much greater economic stability for Mexico soon after it became a member. Similarly, the economies of Eastern Europe have benefited greatly from their accession into the EU. Poland, Estonia and the Czech Republic have achieved some of the highest economic growth in Europe since becoming members of the Union.

Based on these two examples, the evolution of economic integration from preferential trading agreements to complete economic integration would appear to be a recipe for high growth and economic prosperity. Other examples, though, seem to put this conclusion in doubt.

Attempts at economic integration among developing countries have not had nearly as positive an impact as those among developed economies and the path toward economic integration is not nearly as clear. NAFTA and the EU brought expanded access to huge new markets for new entrants. Free trade agreements among developing economies were not able to offer a similar stimulus to growth. Mercosur, the Andean Community, the Central American Common Market (CACM) and the Greater Arab Free Trade Area all were formed to stimulate greater intra-regional trade and to promote economic cooperation among members. None of these agreements has had a major impact on trade flows or economic growth.

The key to the success of the EU and NAFTA has been the complementarity of trade and investment of members and the opportunities to access the large developed markets made available to new developing members. If the products and services of member-states are narrowly based and uncompetitive then the benefits offered by economic integration are much less pronounced. The free trade agreements of Latin America suffer from this constraint. The profile of exports among members of the Andean Community and the CACM is similar and trade volume among members is modest. Economic integration under these circumstances has proven to be a poor source of growth stimulus.

ASEAN falls somewhere in between these two extremes noted above. The composition of exports among ASEAN countries is more diverse and less dependent on a few product categories than their Latin American counterparts. Greater cooperation and integration should bring the benefit of more investment to serve a larger market. Still, ASEAN countries often compete in exports and in encouraging foreign investment in a few critical sectors (e.g. electronics). Influential domestic manufacturers remain wary of wider market access and coordinated investment policies. Thus, ASEAN would gain from making progress toward economic integration; however, it would not see the huge benefits offered by membership in the EU or NAFTA.

ASEAN Progress Toward Economic Integration

ASEAN[15] has embarked slowly down the path of economic integration. Since the Bali Summit in 1976, the nations of Southeast Asia have promoted the ideal of economic cooperation. Nevertheless, in the first 15 years after the summit, only lip service was paid to reducing trade barriers and most of the moves toward regionalism were confined to paper only.

In 1992, progress toward trade liberalization and economic integration received a boost with the creation of the ASEAN Free Trade Area (AFTA). Since then, tariffs have significantly declined between the ASEAN 6 (the ASEAN 5 plus Brunei); however, progress toward freer trade overall has been slow, with many fits and starts.[16]

According to a recent McKinsey study,[17] intra-regional trade, as a percentage of the region's total trade, declined by 19% from 1994 to 2001, despite the formation of the ASEAN Free Trade Area in 1993. Although intra-regional trade has declined, AFTA cannot be written off as a failure. Full economic integration, akin to stages five or six of Balassa's continuum was not an ASEAN objective when it created AFTA. According to Narine[18], ASEAN pursued AFTA for four reasons: [1] To provide ASEAN with a new purpose and ensure that the organization remained relevant; [2] To provide greater leverage and a louder voice in international economic negotiations; [3] To make it easier for multinational companies to establish themselves on a regional basis; [4] To make foreign investment in ASEAN countries more attractive and offset the possibility of investment being diverted to China.

AFTA was primarily a *defensive strategy* for ASEAN. Members wanted to protect their share of foreign investment in the face of increased interest in China. Furthermore, they wanted to counter the increased influence of other trade blocks in international trade negotiations. Increased intra-regional trade might have been a welcomed by-product of AFTA, but it was not a primary objective. Rather, AFTA focused on encouraging foreign investment, which had been a primary stimulant of growth over the previous decade.

A second reason for the slow progress towards economic integration has roots in the method of diplomacy used in ASEAN. In its efforts to promote greater cooperation, the association has strived to follow the "ASEAN Way".[19] Based on the principal of governance in a Malay village, the ASEAN Way emphasizes consensus, consultation and "voluntarism." ASEAN tries to avoid violating any of the member's basic interests and often sets aside contentious issues or develops vaguely worded statements that can be open to interpretation. Numerous committees and working groups seem to characterize every aspect of ASEAN's activities.[20] Yet, for all the discussion, ASEAN does not impose any rules or regulations on its members. Members are *not* required to implement policies and ASEAN relies on the voluntary

implementation of all joint declarations and decisions.

Similarly, ASEAN has resisted creating a strong secretariat for the organization that might infringe on the sovereignty and authority of individual members. While the secretariat has grown in size over the past decade, its role is primarily one of logistics and administrative support. It has virtually no oversight authority and does not have the capacity for analysis or recommendation, let alone decision-making.

This approach to decision making means that progress is often slow and halting. Furthermore, the differing stages of economic development and differing economic policies of members inhibit consensus. It is difficult to imagine Indonesia and Singapore having a more different economic profile. Malaysia, The Philippines and Thailand also have their own views on economic policy, which frequently are at odds with each other. Viewed from this perspective, the consensus and cooperation that has been achieved is truly remarkable.

The Price of Fragmentation

Some analysts argue that the slow progress on economic integration is threatening the region's competitiveness and leading to marginalization. A study conducted by McKinsey consultants Adam Schwarz and Roland Villinger for ASEAN's ministers argues that the price of fragmentation has been high. They point to three main concerns about the lack of economic integration in ASEAN:

1. **Subscale Markets**: Manufacturers are forced to produce and market goods for smaller domestic markets. Consequently, manufacturers often cannot reach production levels that are economically efficient or on a globally competitive scale.

2. **Unnecessary Costs**: Different product standards across member countries prevent businesses from standardizing products, which in turn leads to higher production costs.

3. **Unpredictable Policy Implementation**: Policies are implemented inconsistently and regulations are often enforced arbitrarily. The lack of reliable or consistent policies and regulations increases risk and consequently costs.

In addition to these three economic concerns cited by McKinsey, can be added a fourth consequence: dislocation of labor markets. The lack of economic integration has led to higher personnel costs, disparate skills availability and widely varying labor market profiles across the region.

Subscale Markets

The small size and unconnected borders of the Southeast Asian countries create obstacles to building large-scale manufacturing operations. Automotive manufacturing is a case in point. In the past 10 years, automotive manufacturing in China and India has boomed, fueled by a large domestic population and seemingly insatiable demand. The world's largest motor vehicle manufacturers have moved quickly to capitalize on this growth and the number of automotive factories in both countries has mushroomed. Now, some multinational automotive manufacturers are expanding their plants to create capacity for export.[21]

Meanwhile, the automotive industry in Southeast Asia is in the doldrums even though multinational automotive manufacturers have long experience and established operations in the region. Proton, Malaysia's principal automotive manufacturer with 41% of the domestic market, has watched its sales wither and are now looking for foreign partners.[22] Astra International, Indonesia's largest automotive manufacturer, reported a drop of 36% in unit sales in 2006.[23] Thailand's automotive industry has had to scale back its ambitious expansion plans in the face of lower sales in 2006.[24]

Thailand with 1.1 million unit sales in 2005 has perhaps the healthiest automotive industry in Southeast Asia, but it pales in comparison with China's 8 million unit sales[25] or India's 10 million unit sales.[26] The small size of individual ASEAN markets makes it next to impossible for automotive manufacturers to build plants that can compete with those of its northern neighbor.

Unnecessary Costs

ASEAN has made little progress in harmonizing regulations. The multiplicity of regulations and inconsistency in enforcement certainly add to the cost of doing business across Southeast Asia. This is clearly shown through an annual World Bank report, which investigates the regulations that enhance business activity and those that constrain it.[27] The report analyzes and measures ten areas of everyday business: starting a business, dealing with licenses, employing workers, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts and closing a business. Analyzing these factors, the report ranks 175 countries in terms of their ease of doing business.

The results clearly demonstrate the disparity of policies and practices across the region and show how inconsistent regulation adds costs to operating region-wide. According to the World Bank study, Singapore is number one globally in terms of ease of doing business (Hong Kong is the only other territory in all of Asia to rank in the top 10). Thailand is 18th while Malaysia is not far behind at number 25. In contrast, Indonesia ranks 135th and the Philippines 126th in the worldwide ranking of 175 countries. Perhaps equally disappointing, the 2007 ranking of the Philippines and Indonesia has gone down by five and four places respectively as compared to the 2006 ranking.

Areas where Indonesia ranks poorly in the worldwide ranking are the cost and time of starting a new business, enforcing contracts, and dealing with licenses. Restrictions on hiring and firing and the complexities of paying taxes also are relatively onerous in Indonesia.[28] The Philippines scores lowest in protecting investors due to limited disclosure requirements and investor protection. Hiring and firing as well as dealing with licenses are also problematic.[29]

Unpredictable Policy Implementation

Policies toward foreign investment and trade vary widely across the region. Singapore, on one extreme, has the most open economy in the world and aggressively promotes foreign investment. It has successfully attracted the largest amount of foreign investors' funds despite its small size. Only China and Hong Kong surpass Singapore's inflows of foreign direct investment in all of Asia.[30]

On the other extreme is The Philippines, where FDI inflows in 2004 amounted only to US $469 million. The Philippines has long been ambivalent towards foreign investment and free trade. Restrictions on foreign ownership are written into the Philippine constitution and non-tariff barriers have risen recently, along with a resurgence of protectionism.[31] Political turmoil and domestic issues in Thailand and Indonesia have preoccupied policymakers in those countries for most of the past decade. The populism of Thaksin Shinawatra thwarted efforts to open up the Thai economy and no meaningful liberalization occurred under his administration.[32] The recent flip-flop of Thailand's new administration on portfolio foreign investment controls has scarred investors and raised concern about the reliability of Thai financial policy.[33]

While President Susilo Bambang Yudhoyono has brought greater stability to Indonesia, the country has faced a series of natural disasters and terrorist attacks that have taken priority over economic issues. Strict labor market regulations, undependable enforcement of property rights and contracts, corruption and weak public administration remain the primary obstacles to foreign direct investment and economic growth.[34]

Dislocation of Labor Markets

In addition to the three economic issues cited above, lack of cooperation and coordination on labor issues threatens ASEAN's competitiveness. Rigidities in the labor force and labor laws put Southeast Asia at a distinct disadvantage when compared to China, plus personnel costs are relatively high.

A great strength of the Chinese economy is the depth and flexibility of its labor force. Chinese workers are highly mobile, as witnessed by the massive migration home every year at Chinese New Year. Variance in wages and salaries across the country are relatively modest. While salaries are rising rapidly for professional level staff, wages for unskilled workers are kept in check by the continuous flow of labor from the countryside to the cities. At the same time, labor unrest is almost unheard of.

In contrast, labor rigidities, disparate costs and rising industrial unrest are major constraints to growth and inhibit competitiveness across Southeast Asia. Resistance to intra-regional immigration or employment has created labor rigidities. Even in labor-short countries, such as Singapore, the preference is for workers from distant locations, such as Bangladesh and China, rather than close ASEAN neighbors, such as Indonesia or Thailand. Restrictions on immigration plus differences in culture and language inhibit companies from treating ASEAN as a single pool of talent. Ironically, ASEAN expatriate workers and professionals alike are more likely to be found in jobs outside the region than jobs within. The end result of restrictions on labor movement is that shortages and surpluses occur across the region for similar skill sets.

The labor rigidities have a knock effect on costs. Unlike China, the cost of personnel varies widely across the region. Ironically, the smaller countries of Singapore and Malaysia have greater availability of many technical skills than do the larger economies of Indonesia and Thailand. Low investment in education in Indonesia and Thailand further compound the problem of skills availability and leads to disproportionately high costs for professional and managerial positions.[35]

Rising industrial unrest and declining productivity have been a growing problem in Indonesia. Indonesia's new labor law, enacted in 2003, has made the situation worse by increasing mandatory severance payments and allowing local governments to set minimum pay increases for workers.[36] Labor laws in The Philippines are also onerous.[37] Plus, the large number of Filipinos employed as foreign workers are leading to serious social issues at home that have been characterized as "a recipe for stagnation."[38]

Steps Needed for Integration

Economic integration would help address the concerns mentioned above and improve the prospects for higher economic growth in ASEAN. Many analysts have encouraged ASEAN to take more assertive action towards integration. The rise of China and India has re-enforced and made more urgent the call for action on integration.

The McKinsey report cited previously believes that the foremost factor behind the slow progress towards integration is "a lack of political will … because of widespread uncertainty among policy makers and business executives about the end goal of economic integration and its benefits for individual countries."[39] The report recommends a two-pronged integration plan: 1) a sector-based approach to focus the region's integration efforts and, 2) a set of reforms to create stronger regional institutions to manage the integration.

McKinsey would accelerate an integration program for consumer goods and electronics through four initiatives: [1] Eliminate non-tariff barriers by harmonizing regulations; [2] Enhance tariff reform by eliminating tariffs that bring in relatively little revenue while creating an administrative burden; [3] Create a level playing field for capital by eliminating restrictions on cross-border investment; [4] Improve regional collaboration by cooperating in testing for product certification, automating customs and enforcing intellectual property rights.

At the same time, McKinsey urges ASEAN to develop a much stronger institutional framework that would support integration. According to McKinsey, ASEAN should state explicit economic goals and develop a plan for achieving them. ASEAN should move toward "qualified majority voting and strengthen its secretariat and entrust it to analyzing issues and developing recommendations. McKinsey would

also have ASEAN establish a mechanism "to handle any failure of member countries to implement their integration commitments." [40]

Using the experience of the EU as a model, the McKinsey consultants have identified lofty goals and a roadmap for achieving them. Unfortunately, their recommendations appear to be unrealistic and divorced from political realities. The principal obstacles in the way of adopting ambitious goals and plans for economic integration are a vacuum in regional leadership, a lack of consensus on ASEAN objectives and a reluctance to abandon the "ASEAN Way."

Leadership Vacuum

As McKinsey rightly points out, the principal factor behind AFTA's slow progress is the lack of political will. But each of the ASEAN countries except Singapore is engrossed in domestic political issues that preclude an assertive international role. Singapore itself is unable to exert a regional leadership role due to its small size and unique economic character (i.e. a fully open and developed economy).

Indonesia would seem to be the natural candidate for the primary leadership role in the region. It is by far the largest ASEAN nation and has gone through major political reforms since the days of President Suharto. Unfortunately, Indonesia also has been beset by natural disasters and terrorist attacks that have required the administration of President Yudhoyono to focus its attention internally. President Yudoyono has shown little interest or concern for promoting regional integration. The other most likely candidate is Thailand. Thailand has demonstrated support for ASEAN integration and strong leadership within the Association. It was through a Thai initiative that AFTA was originally created. But it is unlikely that Thailand will re-exert a leadership role any time soon. With the overthrow of Thaksin Shinawatra in 2006, the new regime has become preoccupied with returning the country to civilian rule. It will be many years before Thailand can take a lead within ASEAN.

Similarly, the leaders of Malaysia and The Philippines are in no position to take a central international role due to domestic weakness brought about by strong opposition leaders; for example, Malaysian Prime Minister Abdullah Ahmad Badawi is beset by continuous sniping from former Prime Minister Mahathir Mohamad. The administration of President Gloria Macapagal-Arroyo is quite fragile as she battles demands for her resignation and impeachment as well as threats of a coup and allegations of vote rigging. Strengthening ASEAN through economic integration is perhaps the last thing on her mind.

Leadership is unlikely to emerge from within ASEAN until considerable time has past and current political issues have been resolved. Some analysts have called on China, Japan or the US to provide greater support for ASEAN economic integration. In fact, in 2003 China signed a pact with ASEAN that called for a free trade area among the countries by 2010. "ASEAN + 3" (ASEAN plus China, Japan and South Korea), represents another attempt to extend ASEAN beyond Southeast Asia.

Lack of Consensus

As McKinsey rightly points out, ASEAN suffers from no clear economic goals or a plan to achieve them. The difficulty is that no consensus exists, nor is one likely to emerge for the ultimate economic objectives of the Association. Each ASEAN state has a different perspective on its own economic interests. With its open economy, Singapore is unlikely to embrace any regional economic integration that entails a common customs union. Singapore has advocated "open regionalism" where any tariff reductions apply equally to all trading partners, whether or not they are part of ASEAN. Malaysia, on the other hand, backs the "ASEAN + 3" initiative that looks toward a free trade area encompassing ASEAN plus China, Japan and South Korea. Indonesia and The Philippines are the most cautious, claiming that reduced tariffs in many product categories would damage domestic manufacturers.

The lack of consensus extends beyond trade matters. ASEAN initiatives to reduce and reform regulations have met with resistance in many quarters. Consistent regulations on product labeling are at odds with domestic insistence on labels in the local language. This is especially the case for Thailand since Thai uses its own written script, which is unique within ASEAN. Demands for consistent ASEAN regulation often are seen as an encroachment on national sovereignty. Even these small attempts at consistency are sometimes met with hostility.

Reluctance to Abandon the "ASEAN Way"

McKinsey argues that there needs to be greater clarity in objectives and greater detail for a plan to reach those objectives. Furthermore, it argues a strengthened secretariat is essential to monitor and police the commitments that members make.

As was mentioned earlier, ASEAN has been built on consensus, voluntarism and avoidance of conflict. Insistences on clarity, demands for compliance rather than voluntarism, and policing of the agreement are directly at odds with the ASEAN Way. The next step in economic integration requires greater clarity and cooperation. The ASEAN Way has served the region well in advancing the limited goals of the Association. Few ASEAN leaders would be willing to give up their authority to a regional body.

The Way Forward

For these reasons, it is highly unlikely that ASEAN will adopt the recommendations of consultants to aggressively pursue the path of increased regional economic integration and stronger supra-national regional authority. The model of the European Union has limited relevance for ASEAN and a full economic and monetary union should not be considered as an ASEAN aspiration. In fact, ASEAN may never advance to the next stage according to the theory of economic integration.

Singapore's former Prime Minister and current Senior Minister Goh Chok Tong put it succinctly, "The trend toward greater economic integration in Asia will gather speed. East

Asian regionalism will, however, be far less institutionalized than in Europe. New patterns of trade and investment, business decisions, production chains and webs of FTAs will draw the region together. Such a looser and less bureaucratized structure will be more appropriate to East Asia than the EU model."[41]

The way forward for ASEAN is to build on past successes and pursue economic cooperation using its own unique approach. The critical elements of a successful strategy of economic integration is one which encompasses:

The ASEAN Way: As pointed out by Goh Chok Tong, "Southeast Asia enjoys no natural coherence. Rather it is characterized by deep political, ethnic, cultural and religious diversity." The ASEAN Way is designed to deal with the challenges of diversity. ASEAN cannot impose majority will on all members. It must look for areas of agreement and all agreements need not apply to all members. Through patience and persistence, the ASEAN Way of diplomacy is best suited to this region.

Regionalization: Economic integration in Southeast Asia needs to be characterized by "regionalization" as much as "regionalism." The distinction between the two is quite important. According to T. J. Pempel, "regionalism has three key elements: it is top down, it is biased toward formal (usually governmental) agreements; and it involves semi-permanent structures in which governments or their representatives are the main participants. Regionalization, in contrast, develops from the bottom up through societally driven processes. The most important driving forces in regionalization come from markets, from private trade and investment flows, and from the policies and decisions of companies."[42]

The private sector has always had a critical role in economic policymaking in Southeast Asia. Private sector involvement in the process of economic integration is essential to its success. Unlike in Europe, governments need not spearhead economic integration in all matters. The benefits of integration are clear to many in the private sector and numerous global, as well as regional companies have already embarked on integrating their East Asian operations. Close private-public cooperation will help ensure that barriers to this integration are dealt with on a practical and case-by-case basis.

Multipolarism: The diversity of Southeast Asia dictates a multipolar approach towards economic integration. A web of agreements and relationships among member and non-member states and groups is likely to characterize closer economic integration in the future. In the past decades, ASEAN and its members have concluded numerous free trade agreements. This trend is likely to continue since no single approach is agreeable or will work for all ASEAN members. Rather than pursue a single approach such as AFTA, ASEAN + 3, or the Free Trade Area of Asia Pacific; ASEAN and its members will identify opportunities that advance growth through increased trade and investment.

ASEAN ties increasingly will extend beyond Southeast Asia. The growing importance of India and China to the world economy will encourage ASEAN to forge ties of cooperation with these two countries. China has already reached agreement on a free trade area with ASEAN, while negotiations with India are underway. At the same time, it is unlikely that members will turn their backs on long-established links to the US, Japan and the EU. ASEAN and its members have numerous trading agreements with all three regions and discussions are underway as to how to make these agreements stronger.

Voluntarism and Informality: Voluntarism and informality are distinctions that have characterized ASEAN since its inception. Members can "opt-in" to agreements and full compliance is rarely necessary before an agreement comes into force. For example, AFTA currently only applies to the ASEAN 6. Voluntarism is highly practical for such a diverse grouping as ASEAN. Rarely is it possible to have full consensus and agreement from all 10 members. Similarly, informality works well for the organization. Discussions often do not lead to a formal, binding agreement among members. Members identify points of commonality during the discussions and those that can agree to a common approach may go forward. This enables progress on contentious issues without enforcing majority will or demanding unanimity.

ASEAN should build on its unique approach to economic integration through regionalization, multipolarism and voluntarism. It should:

Promote regionalization and support private sector initiatives: Working closely with the private sector, the governments of ASEAN can identify and address specific obstacles to greater integration of business across the region. ASEAN sector-specific, public-private working groups should identify critical areas of regulatory reform. ASEAN members can help each other by relying on best practices and pooled resources to reform and coordinate regulatory practices across the region.

Pursue a multi-polar strategy to integration: ASEAN and its members should continue to build and strengthen a network of ties among its members and with its major trading partners. The increased web of trade liberalization and regulatory cooperation will boost economic growth and hasten regional economic integration.

Utilize voluntarism as a core strategy in promoting integration: The AFTA approach to economic integration is the most appropriate for ASEAN. Members accede to the terms of a free trade agreement when they are ready, but benefits accrue to members only when they accede to the agreement. Members are encouraged to adopt regulatory reform and trade liberalization in order to gain the benefits gained by those that have already done so.

The way forward for ASEAN is clear – to build on past achievements and pursue the unique approach that has characterized the grouping since it's founding. ASEAN can gain from the advantages of increased regional cooperation. While Southeast Asia cannot aspire to overtake China as the economic powerhouse of Asia, greater economic integration will increase growth in the region and provide greater opportunities for investors. ASEAN and its members, acting alone and in concert, should take steps to ensure economic integration happens.

Endnotes

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The Role of Government in Technology Transfer to SME Clusters in Indonesia: Micro-level Evidence from the Metal Working Industry Cluster in Tegal (Central Java)[1]

by Tulus Tambunan, Ph.D.

Abstract

It is evident everywhere that levels of productivity are higher in large enterprises (LEs) and foreign-owned enterprises than in small and medium enterprises (SMEs), partly because they have higher levels of technology capacity. Thus increasing the productivity of SMEs might be facilitated through improved knowledge or technology. The literature on development of SME clusters in developing countries argues that clusters are an effective means for technology transfer to SMEs and government can play as the main source of technology transfer to the clusters, especially in regions where production linkages between LEs and SMEs are not yet well developed. This study indeed shows that in Indonesia government agencies are currently the largest providers of training and similar assistance. However, these programs are marred by a low level of coverage, a lack of effective evaluation and assessment, and a supply rather than a demand orientation. The case study of Tegal metalworking industry also shows that the most important channels for the transfer of technology to SME clusters not only government agencies but also subcontracting arrangements with LEs.

The Technological Capacity and Productivity of SMEs in Indonesia

Official data from the National Agency for Statistics (BPS) in the manufacturing industry gives some evidence to suggest that the value added-labor ratio increases by the size of an enterprise: suggesting that in larger enterprises the level of technology is higher than that in small ones (Table 1). This is true regardless of whether the enterprises are local or foreign owned. Most small enterprises (SEs) and especially most micro enterprises (MIEs) in Indonesia (as in many other developing countries) are traditional enterprises using manual production techniques with a low degree of mechanization. In contrast, medium and large enterprises (MLEs) are mechanized and computerized, production processes are much better managed and organized and they employ more highly skilled workers. In the food and beverages industry, for instance, MIEs and SEs are very simple processing units producing mostly for local markets, in contrast to LEs such as Unilever and Indofood.

Table 1: **Value added-labor ratio (Q1; 000 Rp) and Manufacturing Total Output Contribution (Q2; %) by Size of Enterprises, 1999-2003**

Size group	1999		2000		2001		2002		2003	
	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2
MLEs	115	91	144	92	168	92	166	90	196	91
MIEs & SEs combined	8.4	9.5	9.1	8.4	11	8.5	12	10	14	9.3

Notes: BPS categorizes enterprises in the sector into three groups: MIEs with 1 to 4 workers; SEs with 5 to 19 workers and units with more than 19 workers are defined as medium and large enterprises (MLEs).
Source: BPS

However, many firms do not regard technological capacity as a constraint. Both the 2006 Rural Investment Climate Survey conducted by the World Bank (2006) and BPS Survey on MIEs and SEs in the manufacturing industry in Indonesia show that owners of these enterprises do not regard lack of technological capacity as one of their key constraints. Nonetheless, the evidence suggests that in some industries, MIEs are able to improve their technological capabilities and this benefits their performance. Sandee (1994, 1995, 1996) and Sandee *et al*. (1994, 2000, 2002), amongst others, show that these, the smallest and most traditional enterprises, are in a position to adopt highly technological innovations in products and production process even without the support of government. Moreover, Sandee (1995) shows that technological capability is a major determinant of MIEs and SEs performance. This suggests that there are substantial benefits from improving technological capabilities.

The Importance of Clusters

A common industrial characteristic among SMEs is clustering, where SMEs producing similar products concentrate in a certain area. Since the emergence of the "flexible specialization" thesis in the 1980s, initiated by Piore and Sabel's (1984) book on the "second industrial divide" and the adoption of the clustering approach by the United Nations Industry and Development Organization (UNIDO) as its new SME development strategy in developing countries in early 1990s, many articles, seminar papers and books have been written on SME cluster development in developing countries. UNIDO defines a cluster as a local agglomeration of enterprises, producing and selling a range of related or complementary products within a particular industrial sector or subsector (Richard, 1996).

In recent literature on SME clusters in developing countries, increased attention has been focused on the technological capability of enterprises in these clusters. It is suggested that the competitiveness and technical competence of SMEs could be boosted by being a part of an agglomeration of firms engaging in similar or complementary activities. Clustering could stimulate and facilitate improvements in product, process and organizational arrangements, which are crucial for SMEs to achieve the efficiency and flexibility necessary to compete in the globalized market. Being close to each other allows firms to capitalize on economies of scale and scope and transactions arising from closer inter-firm cooperation. Proximity also allows firms to exploit technology or knowledge spillover arising through direct and indirect exchange of information through personal interactions

Experiences in many developed countries show that clusters can be a powerful means for SMEs to overcome constraints in order to succeed in an ever more competitive mar-

ket environment. Based on empirical findings in many European countries, Richard (1996) argues that, "The European experience seems to suggest that SMEs might not be at a disadvantage at all compared to larger firms, as long as they were able to benefit from the advantages of clustering." Through clustering and networking, individual SMEs can address their current problems related to size, production process, technology, marketing and distribution, procurement of raw materials and other inputs in addition to the risks associated with demand fluctuations. Through a co-operation of enterprises in a cluster, SMEs may take advantage of external economies; for example, the presence of suppliers of raw materials, components, machinery and parts, the presence of workers with sector-specific skills, the presence of workshops that make or service machinery and production tools and the presence of providers of technology. A cluster will attract many traders to buy and sell products from distant markets. Buying large amount from many producers in a cluster during a single visit significantly reduces transaction costs (Berry, et al., 2001). Also, with enterprises clustering it becomes easier for the government, LEs, universities and research institutes, and other development supporting agencies to provide services, such as technical development and management training and general facilities like large machinery for raw material drying and processing into half-finished goods. The services and facilities would be very costly for the providers if given to individual enterprises in dispersed locations (Tambunan, 2000)

The importance of clustering is also supported in various case studies throughout Indonesia. According to Weijland (1994, 1999), rural clusters in Indonesia have a seedbed function for the development of rural SMEs. This demonstrates that clustering improves rural producers access to outside markets. Klapwijk (1997) argues that SME clusters are important for the development of rural industries because productivity in clusters appears to be higher than in dispersed enterprises. One of the main reasons is that clustering stimulates active involvement of traders and LEs in the agglomeration of SMEs. A more interesting finding is from Sandee (1994, 1995, 1996), which shows that enterprises in clusters are in a better position to adopt innovations in products as well as production processes than dispersed enterprises.[2]

Types and Development of SME Clusters

In Indonesia, SME clusters are observed in both rural and urban areas, although mostly on the outskirts of big cities. Most clusters in Indonesia were established naturally by local communities with a long history of producing a specific product. Based on the comparative advantages of the products they make, at least with respect to the abundance of local raw materials and workers who have special skills in making such products, many of these traditional clusters have a large potential to grow. Take for example the clusters of batik producers that have long existed in various districts throughout Java: Yogyakarta, Pekalongan, Cirebon, Surakarta and Tasikmalaya.

As shown in Table 2, according to their level of development, clusters in Indonesia can be classified into four types, each with its own characteristics (Sandee and terWingel, 2002). The first type dominates clusters in Indonesia at more than 90%, and indicates that the process of clustering in the country remains in an infant stage. Altenburg and Mayer-Stamer (1999) refer to such clusters as "survival" clusters of MIEs. This type of cluster displays many characteristics of MIEs with a level of productivity and wages much lower than that of SMEs. In these clusters the degree of inter-firm cooperation and specialization is low, reflecting the lack of specialists in the local labor force as well as a fragile social fabric. Cluster development has stagnated in the sense that for many years there has hardly been any development in terms of market expansion, increased investment and size of production, improved production methods, management and organization and product development (ADB, 2001). Sandee and ter Wingel (2002) argue that artisanal clusters are characterized by a lack of change through time; the producers produce the same products with the same technology that are sold to the same local markets. These enterprises remain because there is still a market for their products, mainly local and from low-income households.

The second type develops rapidly in terms of skill improvement, technological upgrading and successful penetration of domestic and exports markets. The active clusters may still be artisanal in character, and thus face quality-related problems in addition to a limited local or domestic market. Typical examples of these include roof tiles clusters, metal-casting clusters, shuttle-cock clusters, shoe clusters and brass-handicraft clusters. At this stage some enterprises start

Table 1: **Different Types of Cluster in Indonesia**

NO	TYPE	CHARACTERISTICS
1	**"Artisanal"**	Mainly MIEs; low productivity and wages; stagnated (no market expansion, increased investment and production, improved production methods, and management, organization and production development; local market (low-income consumers) oriented; uses primitive or obsolete tools and equipment; many producers are illiterate and passive in marketing (producers have no idea about their market); the role of middlemen/traders is dominant (producers are fully dependent on middlemen or trader for marketing); low degree of inter-firm cooperation and specialization (no vertical co-operations among enterprises); no external networks with supporting organizations.
2	**"Active"**	Used higher skilled workers and better technology; supplied national and export markets; active in marketing; the degree of internal as well as external networks is high.
3	**"Dynamic"**	Trade networks overseas are extensive; internal heterogeneity within clusters in terms of size, technology, and served market is more pronounced; leading/pioneering firms play a decisive role.
4	**"Advanced"**	The degree of inter-firm specialization and cooperation is high; business networks between enterprises with suppliers of raw materials, components, equipment and other inputs, providers of business services, traders, distributors, and banks are well developed; cooperation with local, regional or even national government, as well as with specialized training and research institutions such as universities is good; many firms are export-oriented (mainly through trading houses or exporting companies).

to influence the development trajectory of the cluster as a whole, and some enterprises produce for export through middlemen or traders or trading houses from outside the cluster.

Examples of the third type are textile-weaving clusters in Majalaya and Pekalongan, furniture clusters in Jepara, wig and hair accessories clusters in Purbalingga, and handicraft clusters in Kasongan. Many producers in these clusters have developed extensive trade networks not only domestic, but also international. Internal heterogeneity within clusters in terms of size, technology, and served market is also more pronounced. Inter-firm specialization and cooperation among firms inside clusters are well developed.

One of the most striking features of this type, and to a certain extent in "active" clusters, may be the decisive role of leading/pioneering firms, which are usually larger and faster growing firms, to manage a large and differentiated set of relationships with firms and institutions within and outside the cluster. Some leading firms even have utilized cutting-edge technologies in production (Supratikno, 2002a). Examples are clove cigarette clusters in Kudus, tea-processing clusters in Slawi, and tourism clusters in Bali. In the case of the clove cigarette clusters in Kudus, their products are able to outperform products from LE like Philip Morris and BAT. Similarly, the tea-processing cluster in Slawi, led by a big company named Sostro, has grown up as the market leader in the Indonesian soft drink market, leaving giant Coca Cola behind (Supratikno, 2002a).

With respect to the fourth type, only a few clusters can be included in this category, namely clusters that are more developed and that become more complex in structure than those in the third type. In the fourth type the degree of inter-firm specialization and cooperation is high, and enterprises in these clusters have developed business networks with suppliers of raw materials, components, equipment and other inputs, providers of business services, traders, distributors, banks and other supporting institutions. This type of cluster has good cooperation with local, regional or even the national government, as well as with specialized training and research institutions. Within this process, the clusters may also expand geographically, e.g. by regularly drawing on inputs from a nearby region, or developing regular cooperation with a university or research institution in another city. Many enterprises in this type of cluster are export-oriented; however, most of them already export indirectly through trading houses or export companies (ADB, 2001).

Moreover, advanced clusters often overlap and interlink with other clusters in the same region. Such cluster agglomerations, or industrial districts, form the most complex form of clustering, where different sectors or sub-sectors mutually depend on and benefit from each other. Prominent examples of cluster agglomerations include North-Central Italy: tourism, food industry, fashion industry, furniture industry and machinery industry, southern Germany: vehicle, electronics, machinery, and software industries and Greater London: banking, insurance, software, publishing, film and music, tourism, fashion industry, advertisement, business services. In Indonesia one example of a cluster agglomeration is the Yogyakarta-Solo area with its tourism, furniture and interior decoration, metal processing, leather goods and textile/clothing clusters, which all mutually benefit each other.

Main Channels for Technology Transfer to SME Clusters

In Indonesia, three main channels for the transfer of technology to SME clusters exist. They are subcontracting with LEs including multinational companies located outside the cluster, interacting with foreign tourists and working with government agencies such as departments, R&D institutes and universities.

Subcontracting

During the Suharto era, the government imposed a system of protection and local content rules in a number of industries including machinery, electronics and the automobiles, as part of an import substitution policy. These local content rules stand as a clear lesson in how government interference does not facilitate the use of subcontracting as a means for technology transfer. The main aim of this policy was to encourage industrialization in the country and also to encourage a pattern of industrial development that followed Japan's industrial pyramid. In this model, SSIs were at the base to support MSIs, which then supported LSIs at the top of the pyramid (TAF, 2000).

However, industrial development in Indonesia did not follow the same pattern as in Japan. On the contrary, the local content policy resulted in a vertically integrated production system within LSIs. The Asia Foundation (TAF, 2000) argues that the lack this policy's success in creating strong interdependence between SSIs, MSIs and LSIs was largely due to the government's excessive interference, which aimed at replacing market mechanisms.

The economic rationale behind the local content policy was to create a captive market for domestic products in order to increase the economic scale of production and thereby to increase efficiency. However, government interference went too far. The government decided which products were to get priority in this policy, and introduced fiscal incentives in addition to prioritizing certain important products. The determination of priorities does not always appear to have been based on only economic considerations such as SMEs' capacity for investment and absorption of technology.

Similarly, Thee (1990b, 1997) argues that such production linkages did not develop smoothly during the New Order Era because of market distortions and the lack of skills and low technological capabilities of local firms, especially SMEs. SRI International (1992) found that such linkages between LEs and SME clusters are weak and only a small number of clusters, all located in Java, established subcontracting relationships with LEs. The general impression from other studies is also that subcontracting between LEs and SMEs is weak, mainly because the latter cannot meet the required standard of quality due to their lack of technology and skills.[3]

Although the mandatory deletion programs during the New Order Era were largely unsuccessful in developing viable domestic supplier firms, successful private-led subcontracting networks did arise in some industries with the evidence showing that these arrangements did successfully facilitate technological capacity building. For example, there is the case of Astra Otoparts, part of the Astra International Business Group, Indonesia's largest integrated automotive company. Through Astra Otoparts, Astra International was able to develop several SMEs into efficient and viable suppliers. As a result of the rigorous training, which Astra provided to local suppliers with potential, these suppliers, over time, were able to produce a wide range of parts and components for cars and motorcycles according to the strict quality standards set by Astra, and also to meet its strict delivery schedules.

Foreign Tourists

Since the mid-1970s foreign tourists have represented an important informal channel for the transfer of technology from abroad to many SME clusters in Indonesia. The remarkable export performance of the garment industry in Bali, and of the furniture industry in Jepara, Central Java, since the mid-1970s illustrates the importance of this channel.

The case of Bali's garment industry in particular shows the importance of foreign tourists as an important source of innovation, as they were able to act as marketing intermediates by connecting local producers with retail outlets abroad. These foreign intermediaries also communicated important information on design and production techniques to the inhabitants of the clusters. Foreign tourists as buyers provided information and technical and managerial assistance on plant layout, advocated the purchase of the most appropriate machines and quality control methods, and also often acted as technical consultants to SMEs. As a consequence, these firms were able to achieve higher levels of efficiency and accuracy (Cole, 1998).

Foreign tourists also provided vital information and technical, managerial and marketing assistance during the development of the export-oriented furniture industry in Jepara, Central Java. As a result, the quality of Jepara furniture has steadily improved (Sandee, *et al*. 2000: 5-7). Foreign tourists have also played a crucial role in providing guidance to SMEs on furniture designs popular in the export markets and the quality standards required to penetrate these markets (Berry and Levys, 1994; Schiller and Martin-Schiller, 1997)

These two cases show that non-farm SMEs in Bali and in and around Jepara have benefited from the inflows of technologies through an informal channel, namely foreign tourists. However, an important conclusion from these studies is that local SMEs must have some basic industrial competence in their particular field of activity to be able to absorb the inflow of technology or knowledge. In this regard, Bali and Jepara are still exceptional cases. In general, the capability of Indonesian non-farm firms, especially MIEs and SEs in rural areas to adopt and deploy new technologies, is limited due to the lack of management capacity, access to information, skilled workers and capital.

Knowledge diffusion from universities and research institutes

There is a growing literature on knowledge diffusion from universities and research institutes to non-farm firms, particularly manufacturing firms, through publications, patents and consulting.[4] However, studies focusing on knowledge diffusion from universities or research institutes to non-farm firms in Indonesia are rare.

In Indonesia the public science and technology (S&T) institutes consist of the 12 national-level and several regional-level R&D centers of the Agency for Industrial Research and Development (BPPI), the Department of Industry, and the research centers of the non-departmental government research institutes, particularly the Indonesian Institute of Sciences (LIPI) as well as the Agency for the Assessment and Application of Technology (BPPT). However, BPPI's R&D centers are mostly engaged in product certification, training and testing activities for manufacturing firms, particularly the state owned enterprises (SOEs) and SMEs. Their research staffs are generally not well trained, and are often not aware of the latest technological developments in their fields. Moreover, much of their laboratory equipment is obsolete due to under funding (Lall & Rao, 1995) and even more so after the Asian economic crisis. Hence, in general they are not able to provide adequate technical information or technology support services to Indonesia's manufacturing firms (Thee, 1998). After the Asian economic crisis no new evidence has emerged about the establishment of linkages or cooperation between R&D institutes or universities with non-farm firms, including SMEs.

The non-departmental government institutes, particularly LIPI and BPPT, are better funded, better equipped and better staffed with highly-trained researchers, many who have pursued postgraduate training abroad. However, like the Department of Industries R&D institutes, the research centers of LIPI and BPPT have not played a significant role in developing the technological capabilities of Indonesia's non-farm firms, particularly in the manufacturing industry. The reason for this is that they have generally not been able to establish mutually profitable linkages with national industry, particularly private manufacturing firms. Because of their lack of contact with national industry, they are generally not aware of the technological needs of private manufacturing firms and therefore lag behind world technological frontiers (Lall & Rao, 1995). As a result of their failure to establish mutually profitable linkages with non-farm firms, particularly in the manufacturing industry, most, if not all, of their research is supply rather than demand driven (Thee, 1998).

Moreover, the universities and R&D institutes are located mainly in urban areas, with little interest in the problems of rural non-farm firms. The available literature confirms that spillovers from universities or R&D institutes to non-farm firms are positively correlated with geographical proximity.[5]

The Effectiveness of Government and Government Funded Programs to Build Technological Capacity of non-farm SMEs

In Indonesia, almost all known types of government intervention to promote the development of SME clusters have been tried at one time or another. These include subsidized credit, such as credit for small farmers and village cooperatives (KUD), small-scale credit (KIK, KMKP, KUK) and credit for village units (KUPEDES), development of small rural development banks (BKD), human resource development trainings such as in production technique, general management (MS/MUK), management quality systems (ISO-9000), and entrepreneurship (CEFE, AMT) that provide total quality control advice, technology and especially internet access (WARSI), advisory extension workers, subsidized inputs like facilitation in setting up of Cooperatives of Small-Scale Industries (KOPINKRA) in clusters, development of infrastructure, building special small-scale industrial estates (LIK), partnership programs (the Foster Parent scheme), Small Business Consultancy Clinics (KKB), establishment of the Export Support Board of Indonesia (DPE), establishment of common service facilities (UPT) in clusters, and implementation of an incubator system for promoting the development of new entrepreneurs.

The SMERU Research Institute has mapped out most of the important assistance programs to strengthen micro and small enterprises (MIEs and SEs) provided by government and non-government institutes during the period of 1997-2003, showing that most are run by the government (SMERU, 2004). The data in Table 3 show that there were 64 institutions with such programs. A total of 594 programs were identified, two-thirds provided by the government.[6] NGOs (18%), donor agencies (8%), banking institutions (5%), private companies (2%), and other institutions conducted the other assistance programs. The government continues to run 127 different support programs.

Table 3: **Number of institutions and assistance programs to strengthen MIEs and SEs, 1997-2003**

Institutions	Number of institutions	Number of assistance programs		
		Total	Still continuing	
			Total	%
Government institutions	13	388	127	32.7
Banking institutions	7	31	25	80.7
Private companies	10	12	12	100
Donor agencies	8	46	15	32.6
NGOs	20	109	79	72.5
Others	6	8	8	100
Total	64	594	266	44.8

Source: SMERU (2004)

Table 4 shows the type of assistance provided by these programs. The number of activities within each program also varied, but generally ranged from between one and three. In total, the most common types of activities were the provision of training (22.9%), capital assistance/credit (17.3%), facilitation (16.1%), and the dissemination/introduction of new technology (15.2%).

The data in Table 4 show that government agencies were the most common to introduce new technology (27.9%) and provide training (21.1%), whereas other institutions mostly provided capital assistance. Of all the executing institutions, government agencies played the most prominent role (50.9%), followed by NGOs (29.4%) and donor agencies (10.1%). Based on the type of activity, training was mostly undertaken by government institutions (46.9%) and NGOs (37.2%). Capital assistance was mostly provided by local and international NGOs (50.3%), followed by government institutions (15.5%) and banking institutions (14.9%). NGOs (52.4%) and government institutions (35.7%) mainly provided facilitation.

Table 4: **The proportion of assistance programs to strengthen MIEs and SEs based upon the type of activities and the executing institutions**

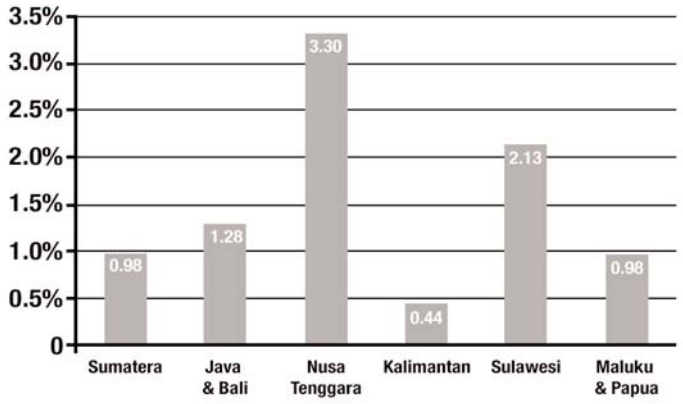
	Gov't institutions	Banking institutions	Private companies	Donor agencies	NGOs	Others	Total
Capital assistance	5.3	52.9	25	21	29.6	28.6	17.3
Training	21.1	13.7	22.2	19	29	21.4	22.9
Facilitation	11.3	9.8	19.4	7.6	28.7	0	16.1
Information	1.9	7.8	2.8	3.8	1.6	21.4	2.6
Facilities	16.2	2	5.6	8.6	1	0	9.7
Promotion	3	3.9	13.9	6.7	1	7.1	3.3
Dissemination/introduction of new technology	27.9	0	0	6.7	1.3	0	15.2
Guidelines	4.3	0	0	0	0.7	0	2.4
Others	9	9.8	11.1	26.7	7.2	21.4	10.5
Types of activities	531	51	36	105	307	14	1044

Source: SMERU (2004)

Despite their large number, the level of coverage of assistance programs is very low, reaching 1% or less of eligible MIEs and SEs (Figure 1). Also, coverage is heavily skewed towards Java and Bali, i.e. of 481,714 non-farm MIEs and SEs that received support in 2003, 71% were located in Java and Bali.

Despite this low level of coverage, those enterprises that do receive assistance appear to benefit from it. To assess the effectiveness of assistance programs, SMERU (2004) studied 172 MIEs and SEs in six Kabupaten/Kota. These firms were mostly informal, non-legal entities whose turnover and employees fluctuated overtime, and which operated without any or with only simple technology. A large number of MIEs (58.6%) and SEs (63%) stated that by obtaining assistance their businesses had improved and increased revenues. Unfortunately, it was not determined whether there had been

Figure 1: **Proportion of SEs and MIEs receiving assistances from government by region, 2003 (% of total SEs and MIEs in the region).**



Source: BPS (SUSI 2003)

an increase in knowledge or technological capability as a result of the training or technical assistance received.

Typically, government programs are evaluated according to the number of enterprises who participate. The actual outcome of the program is generally not assessed. Thus, it is impossible to tell for most government programs whether they are effective or not in improving technical ability. Moreover, program benefits should be compared with program costs to determine the net benefits, but this is generally not done (van Dierman, 2004).

The few studies conducted suggest that most SME development programs have not been very successful.[7] For instance, the Foster Parent (FP) program attempted to create productive linkages between large and small firms, but levels of participation were low and very little training and technical assistance was supplied.[8] Furthermore, the emphasis was on the provision of capital and marketing assistances. SUSI data 2003 (BPS) show that only 11% of MIEs and 3% of SEs received training and technical assistance from the program.

The general impression is that the FP was essentially a non-market mechanism to pressure LEs and the SMEs into a "forced marriage." International evidence shows that dense patterns of linkages and partnerships are not established through mandatory requirements, rather, they are established when they offer commercial benefits to both parties.

Low participation is a common feature of such programs. For example, SUSI data (BPS) shows that the majority of MIEs and SEs were not members of KOPINKRA. The reason mentioned by Klapwijk (1997) states:

> "In view of the wide definition of small industry employed by the Ministry, much of the promotion efforts may have bypassed the smallest enterprises that are most in need of assistance … The extension officers generally have little technical or business experience, and training or other technical facilities have been largely provided according to the directions of central planners, rather than having been adapted to local needs."

Another more comprehensive technical assistance program has involved the development of technical service units (UPT)) in existing SME clusters of similar industries across provinces. These units provide extension and technical services and training courses, and are staffed by government technical officers who have received special training. Van Diermen (2004: 51) concludes that the UPT extension service program has achieved poor results. It has failed to deliver efficient services, to target appropriate recipients or to address the important criteria of providing a net benefit to society and/or effectively addressing equity or fairness objectives. In particular, van Dierman notes that: [1] Types of services are highly supply-oriented rather than demand-driven; [2] Most of the machines and equipments are outdated. Originally, these units were supplied with modern technological machines and equipments. However, over the years, especially after the economic crisis 1997/1998, budget constraints have prevented the replacement of the existing equipment; [3] Services have been delivered indiscriminately to clusters; [4] The staff of the UPT had not had the appropriate training to respond to entrepreneurs' needs; [5] There was not great enough flexibility in the system to respond to the changing needs of SMEs, possibly due to the bureaucratic structure of the UPT.

Based on his analysis of the effects of macro-and micro-policy environments on rural industries in Indonesia, van Dierman (2004: 53) comes to the following conclusions: (i) few of the micro-policies implemented by the government have had a lasting impact on improving rural SMEs, (ii) a significant number of macro-and micro-policies placed additional costs and burdens on rural SMEs' compliance, which led to most operating outside of the formal economy and (iii) macro-policies that created a favorable economic environment, as reflected by consistently high growth rates in GDP, and not biased in favor of LEs, provided the best stimulus for SME growth.

Based on their study on a furniture cluster in Jepara, Central Java, Sandee *et al* (2000) concludes that public intervention is likely to have contributed to the success of this cluster. A comprehensive development package, including technical upgrading through the provision of a common service facility for wood drying, export training, support for participation in trade fairs and investment in improvement of the regional infrastructure: container facilities, roads, telephones, helped the cluster to gradually develop and enter export markets.

On the other hand, Sato's (2000) field study of several clusters in the metalworking and machinery industry in Java concludes that the successful development of these clusters has been achieved without significant government supports. Her impression about the effectiveness of government programs on development of SMEs is also supported by Tambunan's (1998) findings on rattan industries in Padang, West Sumatra. They conclude that the government's efforts to support the clusters have not yielded positive results. One reason appears to be the lack of coordination between the various government agencies. In many clusters, local gov-

ernment agencies such as regional offices of the State Ministry for Cooperatives and SME, the Ministry of Information, state universities, and workers skill training centers (*Balai Latihan Kerja*) from the Department of Manpower provided some supports. However, sometimes different agencies provided similar schemes/programs and there was little attempt to coordinate their efforts.

While the government is the largest supplier of training programs (see Table 4), the evidence suggests that the quality and relevance of the training provided is poor. Most of these programs do not appear to have been very effective in upgrading the technological capabilities of the firms trained. For example, Sandee (1994) notes that training materials and other information do not always match the needs of the producers:

> "In practice, direct assistance frequently concerns brief training sessions of one or two days for a selected group of producers. Such sessions are characterized by a great deal of theory and little attention paid to how to improve the actual running of the business of particular activities."

The evidence shows that universities and research institutes can also contribute to the diffusion of knowledge to domestic firms, particularly manufacturing firms, through publications, patents and consultancy services (Agrawal, 2001).

In Indonesia, the public science and technology institutes consist of the 12 national-level and several regional-level R&D centers of the Agency for Industrial Research and Development (BPPI), the Department of Industry, and the research centers of the non-departmental government research institutes, particularly the Indonesian Institutes of Sciences (LIPI) and the Agency for the Assessment and Application of Technology (BPPT). However, BPPI's R&D centers are mostly engaged in product certification, training and testing activities for manufacturing firms, particularly state-owned companies and private SMEs. Their research staffs are generally not well trained, and are often not aware of the latest technological developments in their fields. Moreover, much of their laboratory equipment is obsolete because the centers are under funded, particularly since the economic crisis in 1997/98 (Lall & Rao, 1995). Hence, in general they are not able to provide adequate technical information or technology support services to Indonesia's manufacturing firms (Thee, 1998).

The non-departmental government institutes, particularly LIPI and BPPT, are better funded, better equipped and better staffed, with highly-trained researchers, many of whom have pursued postgraduate training abroad. However, like the Department of Industry's R&D institutes, the research centers of LIPI and BPPT have not played a significant role in developing the technological capabilities of Indonesia's non-farm firms, particularly in manufacturing industry. The reason for this is that they have generally not been able to establish mutually profitable linkages with national industry, particularly private industry. Because of their lack of contact with national industry, they are generally not aware of the technological needs of private industry and therefore lag behind the world frontiers of technology (Lall & Rao, 1995). As a result of their failure to establish mutually profitable linkages with non-farm firms, most, if not all, of their research is supply rather than demand driven (Thee, 1998).

Moreover, the universities and R&D institutes are located mainly in urban areas, with little interest in the problems of rural non-farm firms. The available literature confirms that spillovers from universities or R&D institutes to non-farm firms are positively correlated with geographical proximity (see e.g. Anselin, *et al.*, 1997).

Evidence on Knowledge Diffusion in the Tegal Metal Working Industry Cluster

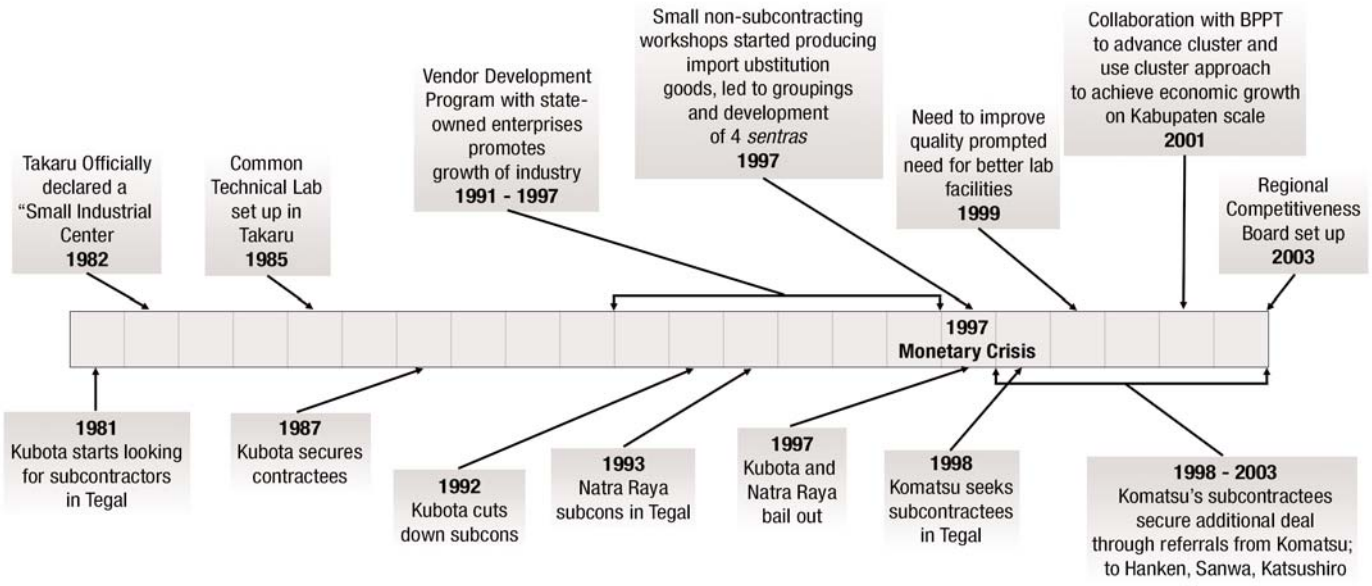
Tegal district is located near the north coast of Central Java on key trucking and rail routes. Major industries in the area include processed food, textiles and furniture. The district generates 22.09% of its annual income from the industrial sector, compared to those in trade and agriculture sectors at 24.24% and 24.62% respectively. These three sectors are the largest contributors to the district economy (Bappeda and BPS Tegal 2005).

Tegal district is among few areas in Indonesia that has a metalworking industrial cluster. The Tegal metalworking industry has about 30,029 workers out of 118,820 workers or approximately 25% of the total workers employed in the district's industrial sector. There are around 2,811 metal workshops in the district. Among these are seven clusters, i.e. groups of geographic agglomerations of metal enterprises producing the same metal products such as components or spare parts for ships and vehicles. Since the New Order Era, clusters have become the focus of government development strategies for SMEs in all manufacturing sub sectors, including the metalworking industry in Tegal district. The majority of metal workshops are small, employing less than 20 workers, mainly men.

Most of Tegal's metal workshops rely on the same basic metalworking technologies, e.g. casting, cutting, bending, drilling or stamping depending on product, machining, welding, and finishing and painting or electronic plating depending on product and assembly. Their comparative advantage has been in filling small orders for simple metal products or components. The small size of workshops gives them greater flexibility and Tegal's abundant cheap labor can outweigh the productivity advantages of more capital-intensive production. There is often intense price competition between workshops.

Tegal district has been a metalworking center since the mid-1800s when it was the locus of several sugar processing factories and related enterprises including locomotive repair shops and metal processing factories. The industry continued, thriving particularly under the New Order's massive infrastructure and development agenda. In the beginning of the 1980s, the first subcontracting activity started in the district, sparking government activity to develop the metal working industry. An overview of the history of the industry in Tegal district is illustrated in Figure 2

Figure 2: **The History of the Tegal Metalworking Industry from Early 1980s**



Types of Workshops

The structure of the Tegal metalwork value chain is illustrated in Figure 3. According to the size of production and level of production sophistication, there are two types of workshops in the Tegal metalworking industry: MSIs and LSIs as one type, called *inti*, and SSIs and CHIs called *plasma*. *Inti* workshops receive orders for metal components from large private companies (LEs) outside the district. Especially large *inti* workshops with up to 100 employees derive a majority of their income from sub-contracting work. During the survey in 2005, there were several large private companies that subcontracted work to Tegal metal workshops, including PT Komatsu Indonesia Tbk, Daihatsu and some divisions of the Astra Group such as PT, Sanwa and Katsushiro. These companies often source metal components from several parts of the country, mostly in West Java. Among these companies, the most prominent one is PT Komatsu Indonesia Tbk, which is a subsidiary of a Japanese company that has established subcontracting production linkages with the Tegal metal workshops since 1998. This company produces various equipment like hydraulic excavators, bulldozers, motor graders, frames and related components, steel cast products as well as off-highway dump tracks for construction and mining activities under the global trademark of Komatsu.

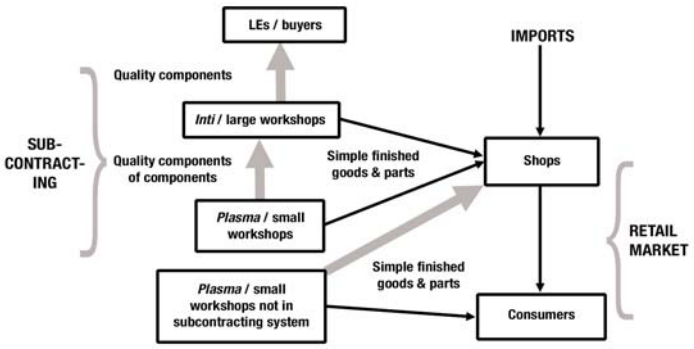
Plasma workshops usually hire cheap, unskilled labor or use family members, mainly men, as unpaid workers, "helpers," and the owner passes basic metalworking skills on to his employees, leaving the technical capacity of the workshop highly dependent on the technical capacity of the owner. *Inti* workshops often sub-contract part of their production to *plasma* workshops.

Inti and *plasma* workshops, which have no subcontracting businesses with *inti* workshops, manufacture entirely for the wholesalers and retailers or sell their products directly to local consumers rather than through marketing channels. Many wholesalers and retailers purchase goods from Tegal metal workshops for resale in stores in cities throughout the country.

Research Methodology

This case study is based on findings from two-weeks of fieldwork in Tegal district with thirty-four respondents. During the fieldwork in-depth interviews were carried out with thirty-four respondents including owners of *inti*, *plasma*, retail manufacturing metalworking firms, wholesalers, retailers, and some NGOs. These respondents were selected from four sub districts: Adiwerna, Talang, Desa Kebasen and Desa Dampyak. Semi-structured interviews were also held with relevant local government officials to discuss government-led knowledge diffusion initiatives and the history of subcontracting linkages in the district. The research sampling focused on clustered metal workshops in the automotive and shipbuilding industries.[9] During the fieldwork, two focus group discussions (FGDs) were held in Desa Kebasen includ-

Figure 3: **Structure of the Tegal Metalwork Value Chain**



ing with workshop owners to discuss the needs of their businesses and to rank and discuss government and private sector trainings that they received in the last five years. Extensive, semi-structured interviews were also conducted with representatives of PT Komatsu and its local subcontractors including three of the four inti workshops filling subcontracting orders directly to PT and with *plasma* workshops that subcontract from Komatsu's *inti* workshops.

Research Findings

The Major Knowledge Providers

Tegal District's main external knowledge providers are LEs like PT Komatsu and to a lesser extent local government. Some domestic retail market suppliers also act as knowledge providers by informing metal workshops about consumer preferences, demand, and new innovations.

To access knowledge from LEs, however, a workshop must have attained a certain level of technical and managerial capacity. Larger metal workshops are more likely to adopt new technologies in their bid to become subcontracting *inti* to LEs. By building upon existing technical and managerial capacity, larger workshops are able to enter a virtuous circle where quality output leads to subcontracts, which lead to private training provided by LEs.

Trainings provided by LEs have proven to be the most successful method of efficiently transferring knowledge to selected inti workshops. While government led initiatives attempt to cover a broader range of workshops, and with more topics, this did not result in the efficient transfer of high-quality, usable knowledge to *inti* workshops.

Though a combination of reputation and personal connections are important, LEs want proof that a workshop has the capacity to produce high quality components. An audit determines if the workshop has the required machinery, manpower, facilities, legal standing and use of ISO standards. The potential subcontractor is then requested to produce a sample component from provided technical drawings. Before an agreement is signed, LEs will often ask for a trial run of the mass production process, subjecting the output to quality control tests.

After winning a contract, an *inti* subcontractor has access to a significant level of technical training. According to a sub-contractor of PT Komatsu, trainings directly addressed the technical needs of the workshop in meeting the production requirements of Komatsu. Indonesian experts from the Jakarta Komatsu office lead the training and used a teaching style that clearly delivered the necessary knowledge, emphasizing practical application with 90% of training time spent in hands-on experience. Trainers also help the workshop identify problems and troubleshoot.

This style of knowledge diffusion has two important limitations. First, it focuses training only on larger *inti* workshops, with smaller sub-contracting firms (*plasma*) benefiting only indirectly, or in the case of small retail market firms deriving no benefit at all. Second, LE training does not seek to develop the *inti* workshop's capability beyond its capacity as a low-cost production center for selected components. Moreover, LEs do help *inti* workshops gain the capacity to manufacture component parts, but there has been little interest in upgrading from specialized parts manufacture to manufacture and assemblage of finished products.

Most *plasma* workshops lack the technical ability to produce complicated components with the precision required by LEs, thus making it unlikely they will receive sub-contracting orders. *Plasma* workshops often use second-hand or homemade equipment. They hire low-skilled, low-wage workers with little or no experience and rely on shop owner's technical knowledge. Since many *plasma* workshop owners built their expertise through working in small shops and rarely have formal academic training, they have difficulties reading technical drawings and instead rely on copying samples, leading to less accurate output. Most *plasma* workshops sell to the retail market or to a domestic market with a limited range of simple final products like pulleys or ship windows. While these retailers may demand a sample product, there is much less emphasis on precision. Generally, retailers emphasize low cost over quality. Moreover, strong competition among retail suppliers inhibits knowledge transfer and encourages production of low-quality, inexpensive products. For knowledge improvement, these *plasma* workshops depend largely on un-targeted, irregularly publicized government programs, which may not be suit their needs

Cheap labor and relatively small, shifting job orders reduce incentives for workshops to specialize or acquire expensive machineries to increase productivity. As one seasoned metal worker explained, the strength of the *plasma* workshop is the flexibility to do smaller orders. However this flexibility becomes a liability to capacity development when workshops must fill many small orders and never develop specialization that leads to expanded command of technology.

Though less direct, the subcontracting system does provide some market opportunities for smaller workshops to benefit from the virtuous circle affecting *inti* capacity building. Subcontracting *plasma* gain from the incentive to produce higher quality for a higher price with technical coaching from *inti* clients in their own virtuous circle. *Inti* respondents for auto components, for instance, turn to *plasma* workshops to produce 10–15% of their orders from LEs, usually components of components or basic parts made more cheaply in small workshops while still passing the quality control requirements of LEs. Often soft loans are provided to *plasma* to help them acquire new machines capable of higher quality output. *Inti* and *plasma* involved in subcontracting are more likely to use the UPTD Lab, especially to test the quality of materials. They are more able to offset lab usage costs through the higher price paid by LEs for quality parts.

Learning takes place through quality control as *inti* often build a procedure for troubleshooting mistakes into their subcontracting relationships. *Inti* workshops engage in coaching *plasma* on quality control standards, and, in some cases support former employees already familiar with these standards in starting up *plasma*.[10]

Knowledge Diffusions Among Small Workshops

It was stated before that a cluster of producers can be a powerful means for knowledge diffusion; but, in this Tegal case, knowledge transfer between small workshops is often contingent on personal networks and conditioned by competition. Especially among workshops producing for the retail market, competition sometimes becomes "unhealthy," which has opposite effects like inhibiting knowledge diffusion; for example, when a competing firm bought off a shop owner's driver after a marketing trip and followed up with lower bids to the same potential clients. Many workshop owners were worried about other firms' tactics to reduce production costs, often at the expense of quality. Some workshops find the right combination of cheap scrap metals to get their products to pass their buyer's inspection standards, but these lower quality items wear out more quickly and do little to strengthen the reputation of the Tegal metal working industry as a whole. This cost cutting in turn creates price pressure forcing competing workshops into a race for the bottom in terms of quality.

Small workshop respondents mentioned that there was hesitancy among metalworkers to share new and possibly advantageous technical knowledge. Technical knowledge was shared, if at all, amongst personal friends whose shops were not in direct competition. The same hesitancy was seen in giving too much training to employees. Ex-employees were likely to start up competing businesses, as was the case with one workshop owner interviewed who lost 40% of his retail market share to ex-employees who began producing ship windows out of lower grade materials.

Marketing information is kept even more closely guarded. In addition to the tactics mentioned above, domestic market suppliers sometimes will come to the cluster and play the workshops off of each other, using their proximity and lack of specialization to engage them in competitive price-cutting. The owner of KPY, one of the district's most successful metal workshops in both subcontracting and retail production, explained that lack of trust and mutual suspicion between metalworkers was the main constraint to metal works development and was the reason for the lack of growth in metal workers associations.

The Role of Government

While the district government has demonstrated a high level of awareness of the importance of enhanced knowledge and skills to improve the competitiveness of local metalworking shops, it has not yet been very successful at systemically improving the skills of local firms. It has attempted to both facilitate direct trainings as well as build up supporting institutions that can assist firms and lower information costs. These efforts, while significant and well intentioned, have been handicapped by poor targeting, lack of sufficient funds, a small number of skilled staff dedicated to the effort, and weak feedback mechanisms between government and the metalworking shops.

The government is the only source of managerial training for *plasma* and retail market workshops as well as many *inti* that receive only limited management training from LEs clients. Since 2001, the majority of government training has focused on technical subjects or technical quality management processes. For some smaller workshops without direct links to LEs, local government-facilitated technical trainings remain the only source of technical information outside the past experience of the workshop owner. However, according to respondents who participated in government trainings, these activities were poorly targeted, often exceeding their skills or the machinery available; or, conversely, focused on skills they had already mastered.

The district government has currently partnered with outside institutions including strong partnerships with the Central Government's Indonesian Agency for the Assessment and Application of Technology (BPPT) and with an NGO, **Yayasan Dana Bakti Astra** (YDBA). Although this strategy succeeds in bringing new knowledge to the cluster, the offerings are often not suited to the needs of workshops attending trainings. In 1997, the district government opened the UPT to enhance subcontracting workshops' ability to produce with precision. The first government funded UPT opened in 1982. There the metal working cluster was able to access the machines necessary to fill their orders. The UPT was not able to keep up with technical advances and soon several of the workshops internalized more advanced machinery.

Policy Implications

This review of literature and empirical studies in Indonesia, including the Tegal case study suggests the following recommendations for policy makers and the private sector's efforts to support capacity building, especially with respect to technology, in non-farm SMEs in Indonesia.

[1] Promote commercial interaction with actors outside the local economy. One of the key lessons from the above analysis is that an outward orientation is critical to success. This is true at a national level where the government should promote an export-led technological learning strategy. According to this strategy, Indonesia's exports should gradually move up the technological ladder from labor-intensive light to more heavier manufacturing products, or from standardized manufacturing processes to more advanced stages of process engineering, product-process interfacing and product design. The success stories also occur at the local level, for instance, the garment industry's success in Bali can be attributed in part to its unique access to foreign tourists.

[2] Promote private sector driven technological learning. Perhaps, the one overriding message from the above analysis is that knowledge diffusion is not something that government does to SMEs. It is something that happens when SMEs work together with LEs on mutually profitable activities. The job of the government in such learning is primarily to facilitate such private interactions by reducing the "search costs" for suitable partners for both SMEs and LEs.

[3] Creating a culture of innovation in the educational system. It has been shown elsewhere that innovative economic systems cannot function well without a highly educated work force. Improving the quality of secondary-and tertiary-level

science and technology skills to encourage creativity and enlarge the number of innovators is a critical strand of policy in supporting technology/innovation capacity building in enterprises. To this end, the central government should improve the educational curriculum to place greater stress on science and technology and on innovation and creativity. The district governments, on the other hand, have the responsibility of effectively monitoring or in creating incentives for improvements in the delivery of educational services.

[4] Improve the capabilities of R&D institutions and universities and make them more demand driven. This should be achieved through the implementation of a national strategy for technological development and would involve increasing the government budget for science and technology, particularly (i) to improve salaries to attract a high-caliber staff, (ii) to upgrade facilities including equipment to meet practice requirements and (iii) to increase capacity in those agencies working in remote rural areas to engage in meaningful outreach activities for the targeted client groups. Indonesia's research institutes and universities will also need to be made more demand driven. This can be done by creating incentives for R&D institution and universities to increase their linkages with the private sector. The R&D institutes should implement three important steps: (i) change their mission statements and philosophies from a supply base to a demand base, (ii) adopt a more progressive approach to selling their developed technologies or innovations and to disseminate information to the private sector, and (iii) provide incentives through various measures including opening access to funding for R&D activities or providing direct subsidies for R&D institutes and universities, granting them greater managerial autonomy, and enforcing greater observance of intellectual property rights.

[5] Make government, and other business development services a facilitator of demand driven training, rather than a provider. Government facilitated technical training can be useful; however, the Tegal case and evidence from other empirical studies show that this training was generally of poor quality and of limited relevance to recipients. The government needs to shift from being the principle provider of such training to avoid crowding in demand-driven private sector training and other business development services. For example, government could help to bear the costs of identifying the types of training needed by SMEs in a local area and help to disseminate this information widely.

[6] Evaluate the effectiveness of specific programs and scrap those that do not work. Given that many of the existing government support programs are not effective in boosting the technological capacity of the vast majority of non-farm SMEs, the government urgently needs to undertake a comprehensive evaluation of the outcomes (rather than merely the inputs) of these programs and scrap those that create no net benefits. More importantly, it should learn the lessons from those programs that are more successful and apply these to the redesign and implementation of the remaining programs.

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2. More empirical studies shown in, among others, Sandee *et al*. (1994), Van Dierman (1997), and Tambunan (1994, 2000, 2006).
3. See for example Harianto (1993), Kitabata (1988), Sato (2000), Supratikno (2001), and JICA (2000).
4. See Agrawal (2001) for a review of this literature.
5. See e.g. Anselin, *et al*., 1997).
6. The scale of each assistance program varied greatly based on the amount of funds, time frame and geographical scope.
7. For discussion explicitly or implicitly on the government programs to support SMEs in Indonesia, see for instance Klapwijk (1997), Sandee (1994, 1995), Sandee et al (1994, 2000, 2002), van Dierman (1997, 2004), and Sato (2000).
8. In this scheme, introduced on a nation-wide basis in February 1992, all state-owned enterprises and big private companies (LEs) were required to assist SMEs with capital, training and technical assistance, marketing, procurement of raw material, and many others. For example, with respect to marketing, the parent companies provided promotion facilities such as trade exhibitions and study tours for the supported enterprises or acted as a trading house. With respect to technology, the parent companies provided the supported enterprises with financial assistance for the purchase of new machines or provided them technical trainings or technicians during the innovation process.
9. These two industries were selected by the local government for intensive assistance based on existing competencies. According to Mr. Dasuki, Head of Industrial Affairs Sub-Agency, the industries showing the greatest competency are those seen as having access to key markets, having many including small workshops involved in the production, and having developed quality management systems.
10. A *plasma* subcontractor for KPY, one of PT Komatsu's *inti*, explained that his company received useful technical coaching as part of a quality control process conducted upon delivery of his product to KPY. In a case of knowledge spillover, his firm applied some of these technical lessons not only to his subcontracting operations, but also to the production of retail market goods.

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A Futuristic Look into the Filipino Diaspora: Trends, Issues, and Implications

by Soledad Rica R. Llorente, Ed.D.

Abstract

The Filipinos overseas…Where are they? Why do they go? What is their future outlook? There are currently eight million Filipinos working and living in almost all countries of the world save one. They constitute a real diaspora, a people displaced, dislocated and dispersed. This article addresses those critical questions by investigating this particular phenomenon and the economic, cultural and political forces propelling it. The study analyzes the serious social and ethical challenges encountered by Filipino workers overseas, and their families back home. It also examines the policy implications for the Philippines and host countries such as the United States. By presenting current demographic data such as age, gender, occupation and regional concentration not only in the U.S but also in other countries, the study attempts to define future trends in terms of the phenomenon's direction and strength. The research framework of the study is critical hermeneutics, which is interpretive and anthropological, using the theories of both Western and Filipino philosophers, political scientists and anthropologists. This article aims to provide deeper understanding and raise the consciousness of communities regarding the Filipino diaspora especially in the United States.

"The irony is that, although longing for home, Filipinos now belong to the world."

Epifanio San Juan, Jr., 1998

Indeed the Filipinos overseas now constitute a diaspora, a critical mass of people, dispersed, displaced and dislocated throughout the world. This phenomenon raises critical questions. Will this diaspora continue? What are some of the forces propelling it? What are its directions and where does it get its strength? What is the profile of the contemporary Filipino immigrant? How does the future look for Filipinos overseas? For their families back home? For the Filipinos in the United States? This study aims to shed some light and some understanding to these issues.

Trends and Patterns

They go as permanent immigrants, temporary contract workers, and overstaying visitors. They are viewed as the new overseas class of the Philippines, its biggest export, described as the "forerunner of tomorrow's economy, supplying all types of labor to the global village" (Diamond, 2002). Approximately eight million Filipinos are overseas, representing almost ten percent of the nation's population. Almost a million leave the country annually to work abroad. "They nurse the sick in California, drive fuel trucks in Iraq, sail cargo ships through the Panama Canal and navigate cruise ships through the Gulf of Alaska. They pour sake for Japanese salarymen and raise the children of Saudi businessmen" (Paddock, 2006). They are propelled to go abroad by various economic, political, and global forces; but most of all, they are driven by the dream to provide financially for their families and loved ones.

In the chart and table below, it is significant to note that among Filipinos abroad, there are more temporary contract workers than permanent immigrants, and there is a considerable number of overstaying, undocumented ones, often categorized by other countries as "irregulars."

In 2003 there were 8.09 million Filipinos overseas, or 10 percent of the 2003 Philippine population of 81 million.

Filipinos Overseas by Type (millions of people)

Type	Number
Temporary workers	3.6
Permanent	3.19
Undocumented	1.3
TOTAL	**8.09**

Source: Commission on Filipinos Overseas, 2004

Typically labor migrants go to comparatively rich countries, preferably ones where they have friends or relatives and whose language they speak or whose religion and culture they share. The contemporary trend and pattern of international migration for Filipino workers are clear and gathering momentum. Five migration streams stand out. The first goes to North America specifically the United States and Canada. A second flow is towards the oil-rich Middle East countries such Saudi Arabia, Bahrain, Oman, Kuwait and even Israel. Another stream goes to rich Asian neighbors like Hong Kong, Japan, Taiwan and Singapore. Another stream of migration goes to western European countries such as Italy, Germany, Spain, and England. A fifth flow goes to various parts of Africa such as Morocco, Tunisia and even Cape Verde. According to Philippine Labor Secretary Patricia Santo Tomas (2005), they are in all countries of the world, save one, North Korea. Of the top twelve destination countries for Filipino migrants in 2003, the United States is first and England is twelfth (Commission on Filipinos Overseas, 2005).

TOP FIVE DESTINATION COUNTRIES OF FILIPINO TEMPORARY WORKERS, 2003

Country	Number
Saudi Arabia	948,329
Japan	197,268
Hong Kong	185,500
United Arab Emirates	172,755
Taiwan	151,824

TOP FIVE DESTINATION COUNTRIES OF FILIPINO PERMANENT WORKERS, 2003

Country	Number
United States	1,979,408
Canada	392,120
Australia	209,017
Japan	77,310
United Kingdom	46,234

While the United States may be the most popular permanent destination, as noted above the top destination country for temporary work for Filipinos is Saudi Arabia with its booming economy demanding workers for its vast oil fields, refineries and construction projects. Almost a million Filipinos, 3,000 daily, leave the country with work contracts, staying away for years, returning for short visits and coming back, if at all, only to retire.

Filipinos in the US

The United States remains the top destination for Filipinos to settle permanently. Around 40,000 of them get admitted for emigrant status in the U.S. annually. If they do not qualify for residency status, there is no preventing them from turning into irregular migrants. There are currently approximately two million Filipinos in the U.S., half a million of them undocumented according to the American Community Survey (2004) and the Commission of Filipinos Overseas (2004). Characterized principally as a search for economic opportunity, the immigration of Filipinos to the United States is intimately related to the political links between both countries. According to the U.S. census, there was an increase of Filipino Americans of 137% from 1980 to 1990 and a 32% increase from 1990 to 2000. Filipino communities are concentrated mostly on the West coast, the East coast and Hawaii, as shown in the table below.

Filipinos in the US, 2004

	US Census 2000	Am. Com. Survey 2004
California	920,000	1,100,000
Hawaii	176,780	188,759
New Jersey	88,408	92,000
New York	86,722	99,000
Washington	65,057	67,330
Florida	54,332	62,000
Virginia	48,016	50,000
Nevada	40,427	58,647
Arizona	16,205	20,200
Alaska	12,488	13,000
TOTAL	**1,508,435**	**1,750,936**

Source: American Community Survey, 2004; U.S. Census, 2000

Although Filipino migration to the United States has had a long history, it gained critical momentum in the last 100 years with the recruitment of Filipinos to farm the sugar plantations of Hawaii and the fields of California. Filipino migration began like a trickle with the first fifteen immigrants arriving in Oahu in 1906 and gradually grew like a series of exponentially increasing waves through the twentieth century. Today, there are more than 188,000 first, second and third generation Filipinos in Hawaii alone, representing almost 15% of the state's population (American Community Survey, U.S. Census Bureau, 2004). The Filipino experience in Hawaii is one of the most storied in Philippine migration. It reflects the struggles and legacies of early Filipino farm laborers to their rise in the political arena of the host state and country. The table below shows the trend of Filipino immigration to Hawaii.

Filipino Americans contribute to the diversity of America in demographic, economic and cultural terms. Although far from being homogeneous, census data shows that Filipinos in the country are mostly employed in the professional and skilled services and are highly educated with an average family income and individual per capita income higher than the national average. The tables below show the profile of Filipinos in the United States as of 2004.

Filipino Immigrants to Hawaii, 1906-2004

YEAR	NUMBER
1906	15
1910	2,361
1950	61,062
1990	168,682
2000	176,780
2004	188,759

Source: Historical Statistics of Hawaii, by Robert C. Schmitt (University Press of Hawaii, 1977); 1980 Census of Population: general population characteristics - Hawaii (U.S. Census Bureau, 1982); 2000 U.S. Census of Population; 2004 American Community Survey (U.S. Census Bureau, 2004)

Profile of Filipinos in the U.S. - 2004

	Filipinos in U.S.	Total U.S. Population
Gender		
Male	44.9%	48.9%
Female	55.1%	51.1%
Educational Attainment		
High School grad.	90.8%	83.9%
Bachelor's degree	47.9%	27%
Professional		
Masters, Doctorate	8.2%	9.9%
Income		
Median family income	$72,165	$53,672
Ind. Per capita income	$25,534	$24,020
Employment	68.8%	65.9%
Average Family size	3.68	3.18

Filipinos in the U.S. by Occupation - 2004

Occupation	Filipinos in U.S.	Total U.S. Population
Management	39.5%	34.0%
Education Sector	31.3%	20.4%
Sales & Office	28.0%	26.0%
Services, Health care	18.0%	16.0%
Transportation	10.0%	13.0%
Construction	4.0%	10.0%
Farming, Fishing	0.5%	1.0%
TOTAL	**100%**	**100%**

Source: American Community Survey, 2004, U.S. Census Bureau

A significant feature of the Filipino demographic data in the U.S. is the relatively young median age, reported by the U.S. Census bureau as 37.8. This means that half of Filipinos in the U.S. are younger than 40 years and half are older. The implication is that the biggest proportion of Filipinos in the U.S. consists of robust vibrant individuals, and further suggests that those emigrating from the Philippines to the United States are young educated professionals: see table below showing age distribution of Filipinos in the United States.

Filipinos in the U.S. by Age - 2003 (Median Age = 37.8)

AGE	PERCENT
Under 5 years	5.20%
5 to 17 years	16.10%
18 to 24 years	8.70%
25 to 34 years	14.70%
35 to 44 years	18.30%
45 to 54 years	16%
55 to 64 years	11.60%
65 to 74 years	5.70%
75+ years	3.70%

Source: American Community Survey, 2004, U.S. Census Bureau, 2004

Emerging Patterns

Various patterns observed over the years have emerged, especially shaping the Philippine international labor migration experience. Stella Go (2002) infers several patterns from data. One is the volume of Filipinos leaving the country to work temporarily overseas throughout the years is decidedly overwhelming in comparison to the volume of people leaving the country to reside permanently abroad. Another is the predominance of the Middle East as a work destination. Furthermore, in the seventies and early eighties the emergence of Asia, particularly its newly industrializing economies, emerged as an increasingly important alternative destination for Filipino labor in the mid-eighties and nineties. According to Go (2002), there is a shift occurring from the preponderance of workers in production, transport, construction, and related industries in the seventies and mid-eighties to an increasing proportion of service workers, particularly domestic helpers in the mid-eighties and nineties. The most significant pattern emerging is that the male-dominated labor migration stream in the seventies has given way to an increasing feminization of these streams in the mid-eighties and the nineties.

The profile of overseas Filipino workers is changing. Whereas the earlier wave of Filipino workers, mainly to the Persian Gulf, consisted predominantly of male construction workers, the overseas Filipino working population has recently become increasingly female. Women now comprise about 55% of the total number of overseas Filipino workers. In spite of the fact that overseas contract work comprises many kinds of labor, the current symbol of overseas workers on the national consciousness of the Philippines is that of the domestic helper (Tadiar 1997). This can perhaps be attributed to the sensational media stories of Filipina nannies and domestic workers experiencing abuse, exploitation, and death abroad.

Filipino women have been described as the quintessential service workers of globalization by Nigel Harris (1995) who points out that, "Filipinas are everywhere, a genuine labor force – maids in Hong Kong and Singapore, workers on Japanese farms, sales clerks in the duty-free shops of Bahrain, secretaries, cleaners and janitors in most of the world's cities from London to Sao Paulo."

Remittances

The underlying motivation for Filipinos to live and work abroad is to financially support their families in the Philippines. They provide donations and infuse capital to the country through remittances, investments, and other forms of contributions. The remittances of overseas Filipino workers continue to be of ever-increasing importance to the Philippine economy. They play a crucial role in propping up the Philippine economy through the money they send to their families back home. The political imagination has transformed the millions of migrant Filipino workers abroad by officially recognizing them as modern-day heroes. Recently, Philippine President Gloria Macapagal-Arroyo described them as "the backbone of the new global workforce" (2006). The table below illustrates the dramatic increase in remittances of overseas Filipino workers back to the country in over one decade.

Remittances of Overseas Filipino Workers 1990-2005 (US$billions)

Year	Remittance
1990	1.2
1992	2.2
1994	2.9
1996	4.3
2000	6.8
2003	7.7
2004	8.5

Source: Foreign Exchange Department, Central Bank of the Philippines, 2005

Economic benefits are the biggest attraction and the most tangible result of overseas employment. A typical overseas worker sends no less than 40% of his or her earnings back home on a monthly basis. Filipino professor Vicente Rafael (2000) observes that "remittances by overseas Filipinos to their families can have a radical effect on people's lives – building houses in depressed rural villages, paying off medical bills, sending little brothers, sisters and cousins to school." Over the years, a significant proportion of Filipino families have relied on foreign remittances as a main source of income. In 1997, 6.2% of Filipino families derived their main source of income from remittances. This translates to a

total of 881,263 families who receive income from overseas. According to Parreñas (2001), the average migrant worker supports five people at home, and one out of every five Filipinos directly depends on migrant workers' earnings.

Closer analysis of the data in 2004 reveals that more than half of remittances come from Filipinos in the United States. The chart below indicates that, 56% of the total $8.5 billion sent to the Philippines that year, approximately $4.76 billion originated from the United States. Filipinos in Saudi Arabia, Italy, Hong Kong and Japan also heavily remitted back to the country.

True, the money they earn trickles into towns and villages, helping build houses, open restaurants and send children to school. But the absence of so many industrious and skilled people — mothers and fathers, engineers and entrepreneurs — also exacts a heavy toll. The worth of it all to individual families is, however, only one part of a cost-benefit analysis of Philippine labor migration. Writer Barbara Posadas (1999) questions whether the financial benefits can adequately compensate for the human and social costs of overseas migration.

Challenges and Opportunities

Economic Opportunities

Filipino workers, their families and the government live in a vortex of tremendous economic opportunities, which exacts a very high social cost. Philippine Labor Secretary Patricia Santo Tomas (2001) reports there are bright prospects for overseas employment with the increasing demand for information technology (IT) and health care professionals. For instance, the United States, Canada, Australia, Germany, Italy, Saudi Arabia, and Singapore are attracting professionals in the IT sector. Japan is trying to attract nurses of Filipino-Japanese ancestry to undergo intensive professional and language training. Austria, the United Kingdom, Ireland, the Netherlands, Canada and Germany are also increasingly hiring Filipino nurses. Moreover, the Philippines continues to be the major supplier of seafarers in the world.

Participating in this research project, Philippine Labor Attaché Helen D. Custodio (2003), offered her forecast for the next five or ten years for Filipinos working overseas:

> There will a growing market for contract workers in the future. In the US there will be an increase in the need for nurses, teachers, and health care service providers because of the aging populations. There is nothing that shows the diaspora is going to be reversed, but the feeling continues that the Philippine government should put a lot more effort in generating employment in the country in order to reduce incentives for workers to seek employment overseas. While there is little the Philippines' government can do to affect the global situation, it does have the ability to put a lot more effort in the regulation of domestic industry so that the rights of the workers are protected.

Social Costs

There is a substantial amount of human suffering and sacrifice borne by those forced to live diasporic lives. The Filipino contract workers, unable to bring their families, endure pangs of separation, especially mothers and fathers from their children, and the culture shock of living in a foreign land. Not all families survive these protracted absences unscathed. Philippine Labor Attaché Helen Custodio records a litany of dire social consequences.

> There is a very human dimension. In the Philippines there is an epidemic of broken families, high drop out rate from school of the children and unwanted pregnancies, plus those who get into drugs, bad company, and those who fall into a life of crime. Overseas, you would not believe some of the cases we have like workers who fall sick, abandoned by employers or workers who suffer physical abuse. The heartbreaking cases are found mostly in the Middle East and Asia. There is emotional abuse, there is exploitation in the form of sexual harassment, maltreatment, rape, imprisonment, sometimes death. Both the worker and their families suffer. There's loneliness to deal with, children suffer due to the absence of parents, sometimes both parents are not home.

Across the Philippines today grandparents often assume the responsibility to raise children. "Now children can buy a lot of computer games, but they don't have a mother or father, or both," Santo Tomas said. The Philippines has grown so dependent on remittances that the thought of doing without them is frightening. "Money from abroad is the only thing that keeps the economy in motion," said Ding Lichauco (2004), former head of the country's economic planning office. A negative effect from this is taking place. A culture of dependency by recipient families on dollars from abroad is insidiously developing, replacing the motivation or drive to be self-sufficient. An entire generation of children and relatives just wait for the mail or the text message on the cell phone that once again there is money in the bank.

Ethical Choices

Despite the knowledge in the Philippines of the hardships facing migrant workers, one out of every ten Filipinos still wants to seek employment outside the country. Overseas Filipino workers struggle with difficult ethical dilemmas vis-à-vis economic imperatives. The pervasive poverty and inequality that plagues the Philippines make it clear why so many Filipinos feel compelled to leave their homes for the uncertainties and dangers of working abroad as a migrant laborer. It is a national tragedy, claims Okamura (1998) for them to depart in such great numbers and at such great distances from families to perform jobs that others refuse to do.

An anxiety emerges from a moral concern for the integrity of the Filipino people, and an economic concern for the progress of the country. Filipina professor Neferti Tadiar (1997) expresses this anxiety:

> Exporting human labor risks our homes, the very core of our Filipino society. It also threatens the fabric of

> our labor force, draining it of its brains and brawn, elements vital to our progress. Filipino overseas workers are not dregs of our society…Pushed to leave instead of encouraged to stay by the government, this means the downgrading of our work force at home, lessening our own capability to perform competitively with other countries and pauperizing ourselves of our own people and of their physical, intellectual and spiritual contributions.

The *Economist* (2001) reports "about half of the Filipina domestic workers in Hong Kong are mothers earning money to send their children to school back home. The other half tend to be eldest sisters working to feed younger siblings. All are their families' primary breadwinners." Their keenest pain, according to the article, is leaving their children and husbands behind for years, or for good, in order to provide for them. These families often break apart due to their separation. It is hard, for instance, to find married overseas workers whose spouses at home have not taken another partner, or even had children with others. Arthur Sodusta Jr., Philippine Labor Attaché to the U.S. (2003), corroborates the report with a personal eyewitness account.

> I have been posted in Saudi Arabia for two years and witnessed first hand the ethical problems. I must tell you that the moral and ethical issues are severe. Our men and women leave their spouses behind and because of the need for companionship, find other partners, cohabit and bear children outside marriage. The real marriages do not survive. And you know, we do not have divorce in the Philippines. But what has troubled me is the fact that many of the children born out of the illicit unions are abandoned overseas.

In the United States according to Sodusta, the most pervasive ethical dilemma for Filipinos concerns their desire to stay and work despite not having proper documents or permits. He adds that many among the half million Filipinos categorized as "irregulars" by the American government resort to sham marriages with American citizens in order to obtain the precious "green card."

Philippine Political Policy

Overseas migration for Filipinos – whether permanent or temporary – is shaped by and is shaping national policy. For the Philippines, migrant labor has grown from being a stopgap measure to being an official policy of the nation. Filipino migrant workers have become the Philippines' largest sources of foreign exchange. In its development policy (2001-2004) under the Arroyo administration, the government now explicitly recognizes overseas employment as a "legitimate option for the country's work force, including the preference for overseas employment." The government actively explores and develops "better employment opportunities and modes of engagement in overseas labor markets." Thus, from managing the flow, government now aggressively promotes international labor migration as a growth strategy, especially of the higher skilled, knowledge-based workers (Go, 2002).

For the Filipino workers, global forces have rendered the rest of the world as the new arena in which to venture and realize their dreams. With modern communications and transportation technologies, they can go farther, faster and cheaper as the world becomes a global village. In the 1970s and 1980s, the Philippines lost its competitive advantage in the international economic sphere, and today its Asian neighbors including Thailand, Indonesia and Malaysia have passed it by in terms of economic development (NEDA, 1998). Increasing the skills and capabilities of the Filipino labor force and making them internationally competitive is another area of political attention. The government reports that with globalization and increasing trade liberalization, the demand for a more skill-intensive and technology-literate workforce to produce high quality goods in the global market will become increasingly greater for more developed economies with a scarcity of labor (Intal, 1997). The Philippine government exhorts its people to seize the opportunity so that professionals and higher skilled workers can participate more actively in the global market.

Implications and Outlook

It is critical to approach overseas migration as a multi-dimensional and multi-level phenomenon. The trends and patterns offered by data, the economic disparity between the industrialized nations and third world countries including the Philippines, the pervasive unemployment and underemployment in the country, the official policy of the government to promote overseas work and the deeply embedded cultural value of Filipinos to support their families and loved ones over and above their personal interests suggest important implications in the outlook for the future. The most significant implication is that the Filipino diaspora will continue to accelerate into the 21st century. And since Filipinos maintain their ties and connections to their families in the homeland, transnational lifestyles, which is the back and forth flow of people, ideas, material resources and projects, will become the rule in the near future. The skills composition of new immigrants from the Philippines may also shift due to the demand for workers in the Information Technology sector of the industrialized world. The aging American and Japanese populations will, however, continue to need health, medical and care workers, which the Philippines can continue to supply.

The social impact of this phenomenon affects the shape and the strengths and weaknesses of Filipino families consisting of children and spouses left behind for years or for good. It is imperative for individual Filipino workers and their families to reflect on the short, medium and long-term impact of the choice to live and work abroad. It is crucial for the government to continuously adapt its policies to the changing environment and respond not only to the economic but social needs of its people.

For purposes of improving and protecting the welfare of its workforce abroad, the government has entered into bilateral agreements with some countries. Many more countries need to be covered. In this vein, other sectors of society such as non-government agencies play an important role in advo-

cating for the rights of overseas workers, especially women. The role of religion remains particularly important. Whether Catholic, Christian or Muslim, the church remains in a strong position to direct the moral compass in addressing the unique ethical dilemmas faced by migrant workers overseas and the families left behind.

For Filipinos in the United States who are the largest block of overseas Filipinos, they have unique issues and implications to examine. As the second and third generations of Filipino-Americans begin to take over from the first, there are serious generation gaps, questions of assimilation or cultural conservation, of going back to the roots or defining new identities that buffet the community.

In the global arena, new economic models are developing. Outsourcing to countries like India, China and the Philippines provide a new way for countries to retrain and retain their manpower and possibly to reverse the migration flow. This study indicates that there are many directions to take and important decisions to make.

Reflections

Clearly, more needs to be done in interpreting contemporary Philippine labor migration across the globe. Numerous voices from the West and from the Philippines raise the significance of its causes and consequences. It has been noted that despite their large numbers and wide dispersal, there is little discussion, analysis and international debate on the status of Filipino migrants, especially temporary workers. It is striking how invisible the work of Filipinos in the global marketplace remains, and how little it is discussed in the First World. There is a need to make visible the invisible Filipino overseas worker.

This paper began with Epifanio San Juan Jr's 1998 quote and profound insight that Filipinos, although longing for home, now belong to the whole world. This paper ends with his admonition that the Filipino diaspora demands a new language and symbolism, a need for a "cognitive mapping" of the geometry and velocity of the movement across national boundaries. This study follows that call and admonition.

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